Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

Edition : 17,11.94 Test oil : ISO 4113

Combination No. : 0 402 046 865A

Injection pump

Pump designation : PES6P120A320LS3321

: -1

EP type number : 0 412 026 766

Governor

Governer design. : RQ275...950PA1085-1

: 0 421 801 691 Governer no.

Cust. part No. : 645 673

Customer-spec. information : RABA Customer

: SIEHE BEMERKUNG Motor

TEST BENCH REQUIREMENTS

Inlet line : 3.1

Test oil inlet

temp. °C Tolerance °C 2.0

Overflow valve : 1 417 413 025

Inlet press. bar : 1.5

Test nozzle holde

: 1 688 901 105 assembly

Opening pressure

208.5 bar Tolerance bar : +- 1.5

Test lines : 1 680 750 089

Outside diameter : 8.0 x inside diameter : 3.0 x length mm 600 :

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant.

per values

BEGINNING OF DELIVERY

26.0 Test pressure bar : Tolerance bar : + 1.0

Prestroke mm : + 0.05Tolerance mm Check

tolerance mm : +- 0.10

Rack travel in mm: 10.50 : +- 1.50 Tolerance mm

: 1-5-3-6-2-Firing order

: 0-60-120-180-240 Phasing

: -300 : +- 0.30 Tolerance Check

: + - 0.50tolerance *NW

Start of delivery mark

: +- 0.50 Tolerance Check

tolerance 'NW : + 0.75

Barrel no. : 1

BASIC SETTING

Rated speed rpm : 600

Rack travel in mm: 14.05 : +- 0.05 Tolerance mm

	+ Rated speed rpm : 460
Del. quantity	- guide sleeve
cm3/1000 strokes : 197.0	+ travel mm : 6.00
	+ Tolerance mm : + 0.10
Tolerance	+
cm3/1000 strokes : +- 1.0	+ Rated speed rpm : 1190
	+ guide sleeve
Check tolerance	+ travel mm : 11.50
cm3/1000s. : +- 4.0	+ Tolerance mm : +- 0.50
	+
Spreed	
Tolerance	+ GUIDE SLEEVE POSITION
cm3/1000 strokes : 5.0	†
	+ Rated speed rpm : 500
Check tolerance	Deal +==== 20.00
cm3/1000s. : 9.0	+ Rack travel in mm : 20.00
Rated speed rpm : 275	† Tolerance mm : +- 0.80
Rated speed rpm : 275	
Rack travel in mm: 9.10	FULL LOAD DELIVERY AT FULL LOAD STOP
Tolerance mm : +- 0.30	T FOLL LOAD DECIVERY AT FOLE LOAD STOP
Del. quantity	Rated speed rpm : 600
cm3/1000 strokes : 22.0	+ Aneroid pressure
Tolerance	+ hPa : 900
cm3/1000 strokes : +- 3.0	Del. quantity
Check tolerance	+ cm3/1000 strokes : 197.0
cm3/1000s, : +- 6.0	Tolerance
Spreed	+ cm3/1000 strokes : + 1.0
Tolerance	+ Check tolerance
cm3/1000 strokes : 8.0	+ cm3/1000s. : +- 4.0
Check tolerance	+ Spreed
cm3/1000s. : 12.0	+ Tolerance
	+ cm3/1000 strokes : 5.0
	+ Check tolerance
(B) SETTING OF INJECTION PUMP	+ cm3/1000s. : 9.0
WITH GOVERNOR	+
	+
OUTS OF COURT AND AND	CONTROL I FUED
GUIDE SLEEVE TRAVEL	+ CONTROL LEVER
Rated speed rpm : 275	T control lever
Rated speed rpm : 275 guide sleeve	position degree : 36.0
travel mm : 2.26	tolerance degree : +- 4.0
Tolerance mm : + 0.10	T toterance degree : 4.0
Total ance have	+ control lever
Rated speed rpm : 1020	position degree : 98.0
guide sleeve	tolerance degree : + 4.0
travel mm : 6.35	
Tolerance mm : +- 0.10	+ RATED SPEED
	+
Rated speed rpm : 950	+ rack travel mm : 13.05
guide sleeve	Rated speed rpm : 1012
travel mm : 6.00	+ Tolerance 1/min : + 5
Tolerance mm : + 0.10	+
	† rack travel mm : 4.00
Rated speed rpm : 369	+ Rated speed rpm : 1100
guide sleeve	+ Tolerance 1/min : + 15
travel mm : 4.64	†
Tolerance mm : + 0.10	+ rack travel mm : 0.50
	+ Tolerance mm : +- 0.50

Rated speed rpm	: 1200	Pressure hPa : 590 rack travel mm : 13.50 Tolerance mm : + 0.05
LOW IDLE		<u> </u>
control lever position degree tolerance degree	: 73.0	FUEL DELIVERY CHARACTERISTICS Aneroid pressure
control lever	7.0	Aneroid pressure hPa : 900 Rated speed rpm : 950 Del. quantity
position degree tolerance degree	: 11.0 : +- 4.0	+ cm3/1000 strokes : 198.0
Testing:		+ Tolerance + cm3/1000 strokes : +- 3.0 + Check tolerance
Rated spe ed rpm rack travel mm Tolerance mm	: 275 : 5.80	cm3/1000s. : + 6.0
Rated speed rpm		+ Aneroid pressure + hPa : - + Rated speed rpm : 500
Tolerance 1/min	: +- 33320	Del. quantity - cm3/1000 strokes : 116.0
Rated speed rpm		Tolerance cm3/1000 strokes : +- 2.0
CRT mm min.	; > 8.00	+ Check tolerance + cm3/1000s. : + 4.0
TORQUE CONTROL		BREAKAWAY
Rated speed rpm rack travel mm Tolerance mm	: 14.05	Rack travel in mm: 13.05 Rated speed rpm: 1012 Tolerance 1/min: + 5
ANEROID/ALTITUDE COMPENSATOR TEST		‡
SETTING		+ STARTING FUEL DELIVERY
Rated speed rpm Pressure hPa	: 500 : 900	Rated speed rpm : 100 Del. quantity cm3/1000 strokes : 154.0
rack travel mm Tolerance mm	: 14.05 : +- 0.05	+ Tolerance + cm3/1000 strokes : - 20.0
MEASUREMENT		Check tolerance cm3/1000s. : +- 24.0
Pressure hPa Rated speed rpm rack travel mm Tolerance mm	: - : 500 : 11.80 : + 0.20	LOW IDLE
Rated speed rpm	: 500	+ Rated speed rpm : 275
Pressure hPa rack travel mm Tolerance mm	: 380 : 12.20 : +- 0.20	rack travel mm : 9.10 Tolerance mm : + 0.30 Del. quantity cm3/1000 strokes : 22.0
		+

Tolerance cm3/1000 strokes : + 3.0 Check tolerance cm3/1000s. : + 6.0 Spreed Tolerance cm3/1000 strokes : 8.0 Check tolerance cm3/1000s. : 12.0

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

Edition : 11.01.95 Test oil : ISO 4113

Combination No. : 0 402 046 865B

Injection pump

Pump designation : PES6P120A320LS3321

: -1

EP type number : 0 412 026 776

Governor

Governer design. : RQ275...1100PA1085

: -1

Governer no. : 0 421 801 761

Cust. part No. :

Customer-spec. information Customer : RABA

: SIEHE BEMERKUNG Motor

TEST BENCH REQUIREMENTS

Inlet line : 3.1

Test oil inlet

temp. °C Tolerance °C 2.0

Overflow valve : 1 417 413 025

Inlet press. bar : 1.5 Tolerance bar : + 0.1

Test nozzle holde

: 1 688 901 105 assembly

Opening pressure

208.5 Tolerance bar

Test lines : 1 680 750 089 Outside diameter : 8.0

x inside diameter: 3.0 600 x length mm :

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant.

per values _____

BEGINNING OF DELIVERY

Test pressure bar : 26.0 Tolerance bar : + 1.0

: 4.45 Prestroke mm Tolerance mm : +- 0.05

Check

tolerance mm : \leftarrow 0.10

Rack travel in mm: 12.50 Tolerance mm : \leftarrow 1.50

Firing order : 1-5-3-6-2-

: 4

Phasing : 0-60-120-180-240

: -300

: + 0.30Tolerance

Check

tolerance °NW : +- 0.50

Start of delivery mark

: +- 0.50 Tolerance

Check

tolerance °NW : + - 0.75

: 1 Barrel no.

BASIC SETTING

Rated speed rpm : 600

Rack travel in mm : 14.00

Tolerance mm : +- 0.05

Del. quantity cm3/1000 strokes : 198.0	guide sleeve travel mm : 6.00 Tolerance mm : +- 0.10
Tolerance cm3/1000 strokes : +- 1.0	Rated speed rpm : 1240 guide sleeve
Check tolerance cm3/1000s. : + 4.0	travel mm : 11.50 Tolerance mm : + 0.50
Spreed Tolerance cm3/1000 strokes : 5.0	GUIDE SLEEVE POSITION
Check tolerance	Rated speed rpm : 500
cm3/1000s. : 9.0 + Rated speed rpm : 275	Rack travel in mm : 20.00 Tolerance mm : +- 0.80
rated speed (pill : 21)	
Rack travel in mm: 9.50 Tolerance mm: + 0.30	FULL LOAD DELIVERY AT FULL LOAD STOP
Del. quantity cm3/1000 strokes : 22.0	Rated speed rpm : 600 Aneroid pressure
Tolerance + 3.0 +	hPa : 900 Del. quantity
Check tolerance	cm3/1000 strokes : 198.0
cm3/1000S. : +- 6.0 +- Spreed +- Tolerance	Tolerance cm3/1000 strokes : +- 1.0 Check tolerance
cm3/1000 strokes : 8.0 Check tolerance	cm3/1000s. : ← 4.0 Spreed
cm3/1000s. : 12.0	Tolerance
†	cm3/1000 strokes : 5.0 Check tolerance
(B) SETTING OF INJECTION PUMP WITH GOVERNOR	cm3/1000s. : 9.0
GUIDE SLEEVE TRAVEL	CONTROL LEVER
Rated speed rpm : 275	control lever
guide sleeve + travel mm : 0.76 +	position degree : 47.0 tolerance degree : +- 4.0
travel mm : 0.76 Tolerance mm : + 0.10	
Rated speed rpm : 1116	control lever position degree : 109.0
mudde allegue	tolerance degree : +- 4.0
travel mm : 7.85 +	_
Tolerance mm : + 0.10	RATED SPEED
Rated speed rpm : 1100	rack travel mm : 13.00
guide sleeve +	rack travel mm : 13.00 Rated speed rpm : 1150 Tolerance 1/min : +- 5
· · · · · · · · · · · · · · · · · · ·	Tolerance 1/min : ← 5
guide sleeve travel mm : 6.00 Tolerance mm : + 0.10 Rated speed rpm : 387	Tolerance 1/min : +- 5 rack travel mm : 4.00 Rated speed rpm : 1220
guide sleeve travel mm : 6.00 Tolerance mm : + 0.10 Rated speed rpm : 387 guide sleeve	Tolerance 1/min : +- 5 rack travel mm : 4.00
guide sleeve travel mm : 6.00 Tolerance mm : + 0.10 Rated speed rpm : 387	Tolerance 1/min : + 5 rack travel mm : 4.00 Rated speed rpm : 1220 Tolerance 1/min : + 15 rack travel mm : 0.50
guide sleeve travel mm : 6.00 Tolerance mm : + 0.10 Rated speed rpm : 387 guide sleeve travel mm : 3.58	Tolerance 1/min : + 5 rack travel mm : 4.00 Rated speed rpm : 1220 Tolerance 1/min : + 15

A06

control lever position degree : 72.0 tolerance degree : + 4.0 Aneroid pressur hPa position degree : 10.0 control lever position degree : 10.0 Rated speed rpm tolerance degree : + 4.0 Testing: Rated speed rpm : 275 Rated speed rpm : 275 rack travel mm : 6.50 rack travel mm : 2.00 Rated speed rpm : 375 Rated speed rpm : 375 Rated speed rpm : 375 Rated speed rpm : 175 CRT mm min. : > 8.50 CRT mm min. : > 8.50 TOLERANCE CONTROL Rated speed rpm : 14.00 Tolerance mm : + 0.10 ANEROID/ALTITUDE COMPENSATOR TEST Rated speed rpm : 500 Rated speed rpm : 14.10 Tolerance mm : + 0.05 Rated speed rpm : 10.00 Rated speed rpm : 500 Rated speed rpm : 500 Rated speed rpm : 1000 Rated speed rpm : 500 Rated speed rpm : 500 Rated speed rpm : 500 Rated speed rpm : 14.10 Tolerance mm : + 0.05 Rated speed rpm : 500 Rated speed rpm : 500	LOW IDLE		Pressure hPa rack travel min Tolerance mm	:
Dosition degree	rou rock		 	
control lever hPa position degree : 10.0 Rated speed rpm tolerance degree : 4.0 Del. quantity cm3/1000 stroke Tolerance cm3/1000 stroke check travel mm : 6.50 cm3/1000s. Tolerance mm : + 0.10 Aneroid pressur rack travel mm : 2.00 Aneroid pressur rack travel mm : 4.00 Tolerance 1/min Tolerance 1/min : + 20 End year Rated speed rpm : 1100 Rack travel in rack travel mm : 14.00 Rack travel in Tolerance mm : + 0.10 Rated speed rpm Tolerance mm : + 0.10 Rated speed rpm Tolerance mm : + 0.10 Rated speed rpm Tolerance mm : + 0.05 Tolerance mm SETTING Rated speed rpm Tolerance cm3/1000 stroke Toler	position degree		FUEL DELIVERY CHA	RAI
Testing: Rated speed rpm : 275		: 10.0	+ Aneroid pressure + hPa + Rated speed rpm	:
Rated speed rpm : 275 rack travel mm : 6.50 Tolerance mm : + 0.10 rack travel mm : 2.00 Rated speed rpm : 375 Tolerance 1/min : + 20 Rated speed rpm : 375 Rated speed rpm : 175 CRT mm min. : > 8.50 TORQUE CONTROL Rated speed rpm : 14.00 Tolerance mm : + 0.10 Rated speed rpm : 14.00 Tolerance mm : + 0.10 Rated speed rpm : 14.00 Tolerance mm : + 0.10 Rated speed rpm : 500 Rated speed rpm : 14.10 Rated speed rpm : 14.10 Tolerance mm : + 0.05 Rated speed rpm : 500 Rated speed rpm : 14.10 Rated speed rpm : 14.10 Fressure hPa : 900 rack travel mm : 14.10 Tolerance mm : + 0.05 MEASUREMENT Pressure hPa : 500 Rated speed rpm : 500 MEASUREMENT Pressure hPa : - Rated speed rpm : 500 Rated speed rpm : 500 Rated speed rpm : 500 Rated speed rpm : 500	_	: +- 4.0	+ cm3/1000 strokes	:
Case		. 275	+ cm3/1000 strokes	:
Rated speed rpm :	rack travel mm	: 6.50	+ cm3/1000s.	:
Tolerance 1/min : + 20 Rated speed rpm : 175 CRT mm min. : > 8.50 CRT mm min. : > 8.50 CRT mm min. : > 8.50 CREATER Speed rpm : 1100 Rated speed rpm : 14.00 Tolerance mm : + 0.10 Rack travel in Rated speed rpm Tolerance 1/min ANEROID/ALTITUDE COMPENSATOR TEST SETTING Rated speed rpm : 500 Pressure hPa : 900 Rated speed rpm : 14.10 Tolerance mm : + 0.05 MEASUREMENT Pressure hPa : - Rated speed rpm : 500 MEASUREMENT Pressure hPa : - Rated speed rpm : 500 MEASUREMENT Pressure hPa : - Rated speed rpm : 500 MEASUREMENT Pressure hPa : - Rated speed rpm : 500				:
CRT mm min. :> 8.50 CRT mm min. :> 8.50 Check tolerance cm3/1000s. TORQUE CONTROL Rated speed rpm : 1100 rack travel mm : 14.00 Tolerance mm : + 0.10 Rack travel in Rated speed rpm Tolerance 1/min ANEROID/ALTITUDE COMPENSATOR TEST SETTING Rated speed rpm : 500 Pressure hPa : 900 rack travel mm : 14.10 Tolerance mm : + 0.05 MEASUREMENT Pressure hPa : - Rated speed rpm : 500 Pressure hPa : - Rated speed rpm : 500 Tolerance cm3/1000 stroke check tolerance cm3/1000s. Pressure hPa : - Rated speed rpm : 500 Pressure hPa : - Rated speed rpm : 500		: +- 20	+ Del. quantity + cm3/1000 strokes	:
TORQUE CONTROL Rated speed rpm : 1100 rack travel mm : 14.00 Tolerance mm : + 0.10 Rack travel in Rated speed rpm Tolerance 1/min ANEROID/ALTITUDE COMPENSATOR TEST SETTING Rated speed rpm : 500 Pressure hPa : 900 rack travel mm : 14.10 Tolerance mm : + 0.05 MEASUREMENT Pressure hPa :			+ cm3/1000 strokes	:
Rated speed rpm : 1100 rack travel mm : 14.00 Tolerance mm : + 0.10 Rack travel in Rated speed rpm Tolerance 1/min ANEROID/ALTITUDE COMPENSATOR TEST STARTING FUEL D Rated speed rpm : 500 Pressure hPa : 900 rack travel mm : 14.10 Tolerance mm : + 0.05 MEASUREMENT Pressure hPa : - Rated speed rpm : 500 rack travel mm : 11.85 Tolerance mm : + 0.20 Rated speed rpm : 500	CKI MM MTA.	: > 0.50		:
Tack travel mm : 14.00 Tolerance mm : + 0.10 Rack travel in Rated speed rpm Tolerance 1/min ANEROID/ALTITUDE COMPENSATOR TEST STARTING FUEL D Rated speed rpm Del. quantity cm3/1000 stroke rack travel mm : 14.10 Tolerance mm : + 0.05 MEASUREMENT Pressure hPa : - Rated speed rpm : 500 Pressure hPa : - Rated speed rpm : 500 Pressure hPa : - Rated speed rpm : 500	TORQUE CONTROL		BREAKAWAY	
Rated speed rpm Tolerance 1/min Tolerance 1/min Tolerance 1/min Tolerance 1/min STARTING FUEL D STARTING FUEL D STARTING FUEL D Rated speed rpm Del. quantity cm3/1000 stroke rack travel mm: 14.10 Tolerance cm3/1000 stroke Check tolerance cm3/1000s. Pressure hPa: Rated speed rpm: 500 rack travel mm: 11.85 Tolerance mm: + 0.20 Rated speed rpm: 500	rack travel mm	: 14.00	‡	
ANEROID/ALTITUDE COMPENSATOR TEST SETTING Rated speed rpm : 500 Pressure hPa : 900 rack travel mm : 14.10 Tolerance mm : + 0.05 MEASUREMENT Pressure hPa : - Rated speed rpm : 500 rack travel mm : 11.85 Tolerance mm : + 0.20 Rated speed rpm : 500	Tolerance mm	: + 0.10	+ Rated speed rpm	:
Rated speed rpm : 500			Total area 17 mm	•
Rated speed rpm : 500	SETTING		STARTING FUEL DEL	IVE
Pressure hPa : 900		: 500	Rated speed rpm Del. quantity	:
Tolerance mm : + 0.05	Pressure hPa	: 14.10	+ cm3/1000 strokes + Tolerance	:
Pressure hPa : - Rated speed rpm : 500 rack travel mm : 11.85 Folerance mm : + 0.20 Rated speed rpm : 500 Rated speed rpm : 500 Rated speed rpm		: +- 0.05	+ Check tolerance	:
ated speed rpm : 500 + Colorance mm : 11.85 + Colorance mm : + 0.20 + Colorance mm : 500 + Rated speed rpm			+ cm3/1000S.	:
Rated speed rpm : 500 + Rated speed rpm	Rated speed rpm rack travel mm	: 11.85	LOW IDLE	
			+ Rated speed rpm	:
Pressure hPa : 120 + Tolerance mm rack travel mm : 12.10 + Del. quantity	rack travel mm	: 12.10		:

Pressure hPa rack travel mm Tolerance mm	: 340 : 13.50 : +- 0.05
FUEL DELIVERY CHA	RACTERISTICS
Aneroid pressure hPa Rated speed rpm Del. quantity cm3/1000 strokes Tolerance cm3/1000 strokes Check tolerance cm3/1000s.	: 900 : 950 : 198.0 : + 3.0 : + 6.0
Aneroid pressure hPa Rated speed rpm Del. quantity cm3/1000 strokes Tolerance cm3/1000 strokes Check tolerance cm3/1000s.	: - 500 : 115.0 : + 2.0 : + 4.0
BREAKAWAY	
Rack travel in mm Rated speed rpm Tolerance 1/min	: 13.00 : 1150 : + 5
STARTING FUEL DELI	
Rated speed rpm Del. quantity cm3/1000 strokes Tolerance cm3/1000 strokes Check tolerance cm3/1000s.	: 100 : 154.0 : + 20.0 : +- 24.0
LOW IDLE Rated speed rpm rack travel mm Tolerance mm Del. quantity	: 275 : 9.50 : +- 0.30

22.0

Tolerance cm3/1000 strokes : +- 3.0 Check tolerance cm3/1000s. : +- 6.0 Spreed Tolerance cm3/1000 strokes : 8.0 Check tolerance cm3/1000s. : 12.0

Note remarks

Refer to Service Info for test and adjustment instructions.
See microcard(s) W400/...

Edition : 05.03.96 Test oil : ISO 4113

Combination No. : 0 402 076 748

Injection pump

Pump designation : PES6P110A720RS3305

: -1

EP type number : 0 412 016 742

Governor

Governer design. : RSV300...1100P1A555

Governer no. : 0 421 833 379

Cust. part No. : 9271058

Customer-spec. information
Customer : LIEBHERR
Motor : D 926 TI
Power KW : 210.0

TEST BENCH REQUIREMENTS

Inlet line : 4.1

Test oil inlet

temp. °C : 40
Tolerance °C : + 2.0

Overflow valve : 1 417 413 049

Inlet press. bar : 1.5 Tolerance bar : +- 0.1

Overflow quantity

min. L/h : 130 Tolerance L/h : + 10.0

Test nozzle holde

assembly : 1 688 901 101

Opening pressure

bar : 207.5 Tolerance bar : + 1.5 Test lines : 1 680 750 008

Outside diameter : 6.0

x inside diameter: 2.0

x length mm : 600

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant.

per values _____

BEGINNING OF DELIVERY

Test pressure bar : 26.0 Tolerance bar : + 1.0

Prestroke mm : 3.20
Tolerance mm : + 0.05
Check

talana

tolerance mm : \leftarrow 0.10

Rack travel in mm : 10.50 Tolerance mm : +- 1.50

Firing order : 1-5-3-6-2-

: 4

Phasing : 0-60-120-180-240

: -300 Tolerance : +- 0.30

Check

tolerance *NW : + 0.50

Start of delivery mark

Barrel no. : 1

BASIC SETTING

Rated speed rpm : 1000

Rack travel in mm : 11.25
Tolerance mm : + 0.05

Del. quantity cm3/1000 strokes : 165.0

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Tolerance cm3/1000 strokes : +- 1.0	CONTROL LEVER
Check tolerance cm3/1000s. : + 3.5	control lever
Spreed Tolerance	tolerance degree : +- 4.0
cm3/1000 strokes : 4.0	RATED SPEED
Check tolerance cm3/1000s. : 7.5	rack travel mm : 10.25 Rated speed rpm : 1040 Tolerance 1/min : + 5
Rated speed rpm : 400	rack travel mm : 4.00
Rack travel in mm: 4.40 Tolerance mm: + 0.10 Del. quantity	Rated speed rpm : 1095 Tolerance 1/min : + 15
cm3/1000 strokes : 36.0 +	rack travel mm : 0.85 Tolerance mm : + 0.55
cm3/1000 strokes : + 3.0 + Check tolerance +	Rated speed rpm : 1260
cm3/1000s. : + 5.5 + 5.5	rack travel mm : 4.00 Rated speed rpm : 1100
cm3/1000 strokes : 4.5 + Check tolerance	
cm3/1000s. : 7.5	LOW IDLE
(B) SETTING OF INJECTION PUMP WITH GOVERNOR	control lever position degree : 78.0 tolerance degree : +- 4.0
GUIDE SLEEVE POSITION	Setting point w/out bumper spring
GUIDE SLEEVE POSITION Rated speed rpm : 800	Setting point w/out bumper spring Rated speed rpm : 400 rack travel mm : 3.90
+	Rated speed rpm : 400 rack travel mm : 3.90 Testing:
Rated speed rpm : 800 Rack travel in mm : 0.50	Rated speed rpm : 400 rack travel mm : 3.90
Rated speed rpm : 800 Rack travel in mm : 0.50 Tolerance mm : + 0.20 FULL LOAD DELIVERY AT FULL LOAD STOP Rated speed rpm : 1000 Aneroid pressure hPa : 1100 Del. quantity	Rated speed rpm : 400 rack travel mm : 3.90 Testing: Rated speed rpm : 400 rack travel mm : 4.40
Rated speed rpm : 800 Rack travel in mm : 0.50 Tolerance mm : + 0.20 FULL LOAD DELIVERY AT FULL LOAD STOP Rated speed rpm : 1000 Aneroid pressure hPa : 1100 Del. quantity cm3/1000 strokes : 165.0 Tolerance	Rated speed rpm : 400 rack travel mm : 3.90 Testing: Rated speed rpm : 400 rack travel mm : 4.40 Tolerance mm : + 0.10 rack travel mm : 2.00 Rated speed rpm : 450
Rated speed rpm : 800 Rack travel in mm : 0.50 Tolerance mm : + 0.20 FULL LOAD DELIVERY AT FULL LOAD STOP Rated speed rpm : 1000 Aneroid pressure hPa : 1100 Del. quantity cm3/1000 strokes : 165.0 Tolerance cm3/1000 strokes : + 1.0 Check tolerance cm3/1000s. : + 3.5 Spreed	Rated speed rpm : 400 rack travel mm : 3.90 Testing: Rated speed rpm : 400 rack travel mm : 4.40 Tolerance mm : 4.40 rack travel mm : 2.00 Rated speed rpm : 450 Tolerance 1/min : + 30
Rated speed rpm : 800 Rack travel in mm : 0.50 Tolerance mm : + 0.20 FULL LOAD DELIVERY AT FULL LOAD STOP Rated speed rpm : 1000 Aneroid pressure hPa : 1100 Del. quantity cm3/1000 strokes : 165.0 Tolerance cm3/1000 strokes : + 1.0 Check tolerance cm3/1000s. : + 3.5	Rated speed rpm : 400 rack travel mm : 3.90 Testing: Rated speed rpm : 400 rack travel mm : 4.40 Tolerance mm : + 0.10 rack travel mm : 2.00 Rated speed rpm : 450 Tolerance 1/min : + 30 TORQUE CONTROL Rated speed rpm : 1000 rack travel mm : 11.25

Rated speed rpm	. 500	+ Del. quantity + cm3/1000 strokes : 152.5
rack travel ma Tolerance mm	: 11.25	Tolerance cm3/1000 strokes : + 1.0
		+ Check tolerance
Rated speed rpm rack travel mm Tolerance mm		
Rated speed rpm		BREAKAWAY
rack travel mm Tolerance mm	: 12.20 : +- 0.15	Rack travel in mm: 10.25 Rated speed rpm: 1040 Tolerance 1/min: 5
ANEROID/ALTITUDE COMPENSATOR TEST		
SETTING		STARTING FUEL DELIVERY
Rated speed rpm Pressure hPa rack travel mm Tolerance mm	: 1100 : 11.25	Rated speed rpm : 100 rack travel mm : 20.50 Tolerance mm : + 0.50 Del. quantity cm3/1000 strokes : 145.0
MEASUREMENT		Tolerance cm3/1000 strokes : + 10.0
Pressure hPa Rated speed rpm rack travel mm Tolerance mm		t Check tolerance cm3/1000s. : +- 14.0
Rated speed rpm	: 550	LOW IDLE
Pressure hPa rack travel mm Tolerance mm	: 650 : 11.00 : +- 0.05	Rated speed rpm : 400 rack travel mm : 4.40 Tolerance mm : +- 0.10 Del. quantity
Pressure hPa rack travel mm Tolerance mm		cm3/1000 strokes : 36.0 Tolerance cm3/1000 strokes : + 3.0 Check tolerance cm3/1000s. : + 5.5
FUEL DELIVERY CHA	ARACTERISTICS	Spreed Tolerance cm3/1000 strokes : 4.5
Aneroid pressure		+ Check tolerance + cm3/1000s. : 7.5
hPa Rated speed rpm	: 1100 : 600	
Del. quantity cm3/1000 strokes Tolerance	: 186.0	
cm3/1000 strokes Check tolerance cm3/1000s.	: +- 2.0 : +- 5.0	End of test specification sheet
Aneroid pressure	. 1	
hPa Rated speed rpm	: - : 550	+

BOSCH INJ. PUMP TEST SPECIFICATIONS Note remarks Refer to Service Info for test and adjustment instructions. See microcard(s) W400/... : 11.09.95 Edition Test oil : ISO 4113 Combination No. : 0 402 076 750 Injection pump Pump designation : PES6P120A720RS3311 EP type number : 0 412 026 760 Governor Governer design. : RSV400...1050P0A602 Governer no. : 0 421 833 483 Cust, part No. : Customer-spec. information Customer : FNH-GEOTECH : P396 Motor Power KW : 179.0 TEST BENCH REQUIREMENTS Inlet line : 4.2 Test oil inlet temp. °C Tolerance °C : +- 2.0 Overflow valve : 2 417 413 086 Inlet press. bar : 1.5 Tolerance bar : + 0.1 Overflow quantity min. L/h : 100 Tolerance l/h: + 20.0

: 1 688 901 103

: 208.5

Outside diameter : 8.0 x inside diameter: 3.0 x length mm : 600 REMARKS (A) INJECTION PUMP SETTING VALUES Set equal delivery quant. per values _____ BEGINNING OF DELIVERY Test pressure bar : 26.0 Tolerance bar : + 1.0 : 3.60 : + 0.05 Prestroke mm Tolerance mm Check ; +- 0.10 tolerance mm Rack travel in mm: 10.50 Tolerance mm : + 1.50 : 1-5-3-6-2-Firing order : 4 : 0-60-120-180-240 Phasing : -300 Tolerance : **←** 0.30 Check tolerance °NW : + 0.75 BASIC SETTING Rated speed rpm : 1050 Rack travel in mm: 11.45 Tolerance mm : + 0.05 Del. quantity cm3/1000 strokes : 158.0

Test lines : 1 680 750 089

bar

Test nozzle holde

Opening pressure

Tolerance bar : +- 1.5

assembly

Tolerance cm3/1000 strokes : +- 1.0	Tolerance cm3/1000 strokes : 5.0
Check tolerance cm3/1000s. : + 4.0	Check tolerance cm3/1000s. : 9.0
Spreed Tolerance cm3/1000 strokes : 5.0	CONTROL LEVER
Check tolerance cm3/1000s. : 9.0	control lever position degree : 96.0 tolerance degree : +- 4.0
Rated speed rpm : 400	T RATED SPEED
Rack travel in mm: 5.20 Tolerance mm: + 0.20 Del. quantity cm3/1000 strokes: 26.0	rack travel mm : 0.85 Tolerance mm : + 0.55 Rated speed rpm : 1320
Tolerance cm3/1000 strokes : +- 3.0	rack travel mm : 4.00 Rated speed rpm : 1160
Check tolerance cm3/1000S. : +- 6.0 Spreed	ASSEMBLY GOVERNOR SETTING
Tolerance cm3/1000 strokes : 8.0	Rated speed rpm : 1093 rack travel mm : 10.45
Check tolerance : 12.0	Rated speed rpm : 1153 Tolerance 1/min : + 5
(B) SETTING OF INJECTION PUMP WITH GOVERNOR	rack travel mm : 4.00 rack travel mm : 0.85 Tolerance mm : + 0.55 Rated speed rpm : 1320
GUIDE SLEEVE POSITION	Rated speed rpm : 1094 + rack travel mm : 10.45
Rated speed rpm : 800	Rated speed rpm : 1154
Rack travel in mm : 0.50 Tolerance mm : + 0.20	Tolerance 1/min : + 5 #ack travel mm : 4.00
governor spring pre-tension click setting x : 4.25	rack travel mm : 0.85 Tolerance mm : + 0.55 Rated speed rpm : 1096
FULL LOAD DELIVERY AT FULL LOAD STOP	Rated speed rpm : 1095 rack travel mm : 10.45
Rated speed rpm : 1050 Aneroid pressure hPa : 1500 Del. quantity	Rated speed rpm : 1155 Tolerance 1/min : + 5 rack travel mm : 4.00
cm3/1000 strokes : 158.0 Tolerance cm3/1000 strokes : +- 1.0	rack travel mm : 0.85 Tolerance mm : + 0.55
Check tolerance cm3/1000s. : +- 4.0 Spreed	Rated speed rpm : 1096 rack travel mm : 10.45
יאס ועט	Rated speed rpm : 1156

- 1 4. 1		
Tolerance 1/min		+ Rated speed rpm : 935
rack travel mm	: 4.00	rack travel mm : 12.00 Tolerance mm : + 0.10
		+ Tolerance mm : +- 0.10
rack travel mm	: 0.85	
Tolerance mm	: +- 0.55	Rated speed rpm : 700
toterance unit	. +- 0.55	T Rated speed rpin : rou
		+ rack travel mm : 12.50
Rated speed rpm rack travel mm	: 1097	+ Tolerance mm : + 0.10
rack travel mm	: 10.45	+
Rated speed rpm	• 1157	ANEROID/ALTITUDE
Tolerance 1/min	+ 5	COMPENSATOR TEST
		T COMPENSATOR (ES)
rack travel mm	: 4.00	†
	.	†
rack travel mm	: 0.85 : +- 0.55	+ SETTING
Tolerance mm	: +- 0.55	+
		+ Rated speed rpm : 500
Rated speed rpm	1098	L Pressure hos . 1500
rack travel mm	10/6	nock though mm • 12.50
rack travet mi	10.45	T rack travet inti
	4455	rack travel mm : 12.50 Tolerance mm : +- 0.10
Rated speed rpm		+
Tolerance 1/min	: ← 5	+ MEASUREMENT
rack travel mm		1
		+ Pressure hPa : -
rack travel mm	• 0.85	Rated speed rpm : 500
Tolerance mm	0.05	rack travel mm : 9.40
loterance mm	: +- 0.55	
		† Tolerance mm : + 0.10
		†
LOW IDLE		+ Rated speed rpm : 500
		+
		+ Pressure hPa : 950
control lever		rack travel mm : 12.25 Tolerance mm : + 0.05
position degree	· 73.0	+ Tolerance mm : + 0.05
tolerance degree		1 Total differ mail
toter arice degree	7.0	Ţ
Cothing maint	and bumpan apping	T
setting point w	out bumper spring	T
Data 1	. /00	FUEL DELTHERY CHARACTERICTION
Rated speed rpm	: 400_	† FUEL DELIVERY CHARACTERISTICS
rack travel mm	: 4. <i>/</i> U	+
		+ Aneroid pressure
Testing:		+ hPa : 1500
		+ Rated speed rpm : 750
Rated speed rpm	: 400	+ Del. quantity
rack travel mm		+ cm3/1000 strokes : 194.0
Tack travet inii		
Tolerance mm	: +- 0.10	+ Tolerance
		+ cm3/1000 strokes : +- 3.0
rack travel mm	: 2.00	+ Check tolerance
Rated speed rpm	: 530	+ cm3/1000s. : +- 6.0
Tolerance 1/min	: +- 20	1
		+ Aneroid pressure
		+ hPa : -
TARALIE CALIFORN		
TORQUE CONTROL		Rated speed rpm : 500
		+ Del. quantity
Rated speed rpm	: 1050	
Rated speed rpm	: 1050 : 11.45	+ Del. quantity
Rated speed rpm rack travel mm	: 11.45	Del. quantity - cm3/1000 strokes : 127.0 - Tolerance
Rated speed rpm	: 11.45	Del. quantity cm3/1000 strokes : 127.0 Tolerance cm3/1000 strokes : + 1.0
Rated speed rpm rack travel mm Tolerance mm	: 11.45 : +- 0.05	Del. quantity cm3/1000 strokes : 127.0 Tolerance cm3/1000 strokes : +- 1.0 Check tolerance
Rated speed rpm rack travel mm Tolerance mm	: 11.45 : +- 0.05 : 750	Del. quantity cm3/1000 strokes : 127.0 Tolerance cm3/1000 strokes : + 1.0
Rated speed rpm rack travel mm Tolerance mm	: 11.45 : +- 0.05 : 750	Del. quantity cm3/1000 strokes : 127.0 Tolerance cm3/1000 strokes : +- 1.0 Check tolerance

STARTING FUEL DELIVERY

Rated speed rpm : 100
rack travel mm : 20.50
Tolerance mm : + 0.50
Del. quantity
cm3/1000 strokes : 195.0
Tolerance
cm3/1000 strokes : + 15.0
Check tolerance
cm3/1000s. : + 19.0

LOW IDLE

400 Rated speed rpm 5.20 rack travel mm 0.20 Tolerance mm Del. quantity cm3/1000 strokes : 26.0 Tolerance cm3/1000 strokes 3.0 Check tolerance cm3/1000s. 6.0 Spreed Tolerance 8.0 cm3/1000 strokes : Check tolerance cm3/1000s. 12.0

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

: 28.06.95 Edition Test oil : ISO 4113

Combination No. : 0 402 076 768

Injection pump

Pump designation : PES6P120A720RS3322 EP type number : 0 412 026 764

Governor

Governer design. : RSV650...1250P8A567

: -2

: 0 421 833 443 Governer no.

Cust. part No. :

Customer-spec. information

Customer : FNH-GEOTECH : 7,5l - DI : 190.0 Motor

Power KW

TEST BENCH REQUIREMENTS

Inlet line : 4.2

Test oil inlet

temp. °C Tolerance °C : + 2.0

Overflow valve : 2 417 413 086

Inlet press. bar : 1.5

Test nozzle holde

: 1 688 901 103 assembly

Opening pressure

: 208.5 bar Tolerance bar : + 1.5

Test Lines : 1 680 750 089

Outside diameter : 8.0

x inside diameter: 3.0 x length mm : 600

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant.

per values _____

BEGINNING OF DELIVERY

Test pressure bar : 26.0 Tolerance bar : + 1.0

Prestroke mm : 3.60
Tolerance mm : + 0.05 Check

: +- 0.10 tolerance mm

Rack travel in mm: 10.50 Tolerance mm : + 1.50

: 1-5-3-6-2-: 4 Firing order

: -300

Phasing : 0-60-120-180-240

Tolerance : +- 0.30

Check

tolerance *NW : + 0.75

BASIC SETTING

Rated speed rpm : 1200

Rack travel in mm: 11.45 Tolerance mm : + 0.05

Del. quantity

cm3/1000 strokes : 153.0

Tolerance cm3/1000 strokes : \leftarrow 1.0

Check tolerance cm3/1000s. : +- 5.0

Om was not		+		
Spreed Tolerance cm3/1000 strokes	: 5.0	‡	CONTROL LEVER	
Check tolerance cm3/1000s.	: 9.0	Ŧ	position degree tolerance degree	
Rated speed rpm	: 650	Ī	RATED SPEED	
Rack travel in mm Tolerance mm	: 4.80 : +- 0.20	Ŧ	Rated speed rpm	
	£ 21.0	Ŧ	ASSEMBLY GOVERNOR	
Tolerance cm3/1000 strokes Check tolerance	: +- 3.0	Ī	Rated speed rpm rack travel mm	: 1263 : 10.45
cm3/1000s. Spreed	: +- 6.0	+	Rated speed rpm Tolerance 1/min	: +- 5
Tolerance cm3/1000 strokes	: 8.0	Ŧ	rack travel mm	: 4.00
Check tolerance cm3/1000s.	: 12.0	†	rack travel mm Tolerance mm Rated speed rpm	: 0.85 : + 0.55 : 1500
(B) SETTING OF INJ WITH GOVERNOR	ECTION PUMP	T t	Rated speed rpm rack travel mm	: 1264 : 10.45
GUIDE SLEEVE POSIT	ION	 + + + + + + + + + + + + + + + + + + +	Rated speed rpm Tolerance 1/min rack travel mm	: 1296 : + 5 : 4.00
Rated speed rpm	: 800	Ī	rack travel mm Tolerance mm	: 0.85 : +- 0.55
Rack travel in mm Tolerance mm	: 0.50 : + 0.20	+++++++++++++++++++++++++++++++++++++++	Rated speed rpm	: 1265
governor spring pre-tension click setting x	: 3.00	+++++++++++++++++++++++++++++++++++++++	Rated speed rpm Tolerance 1/min rack travel mm	; +- 5
	AT FULL LOAD STOP	+	rack travel mm Tolerance mm	: 0.85 : + 0.55
Aneroid pressure hPa	: 1200 : 1000	†	Rated speed rpm rack travel mm	: 1266 : 10.45
•	: 153.0 : +- 1.0	+++++++++++++++++++++++++++++++++++++++	Rated speed rpm Tolerance 1/min rack travel mm	: 1298 : + 5 : 4.00
Check tolerance cm3/1000s. Spreed	: +- 5.0	+	rack travel mm Tolerance mm	: 0.85 : + 0.55
Check tolerance	5.0	+	Rated speed rpm rack travel mm	
cm3/1000s.	: 9.0	++	Rated speed rpm Tolerance 1/min	: 1299 : + 5

rack travel mm : 4.00	†
rack travel mm : 0.85 Tolerance mm : + 0.55	ANEROID/ALTITUDE COMPENSATOR TEST
Rated speed rpm : 1268 rack travel mm : 10.45	SETTING
Rated speed rpm : 1300 Tolerance 1/min : +- 5 rack travel mm : 4.00	Rated speed rpm : 500 Pressure hPa : 1000 rack travel mm : 11.90 Tolerance mm : + 0.10
rack travel mm : 0.85 Tolerance mm : + 0.55	MEASUREMENT
LOW IDLE control lever	Pressure hPa : - Rated speed rpm : 500 rack travel mm : 7.90 Tolerance mm : + 0.10
position degree : 80.0	Rated speed rpm : 500
tolerance degree : +- 4.0 Setting point w/out bumper spring	Pressure hPa : 595 rack travel mm : 11.45
Rated speed rpm : 650	Tolerance mm : + 0.05
rack travel mm : 4.30	START CUT-OUT
Testing:	+
Rated speed rpm : 650 - rack travel mm : 4.80 - Tolerance mm : + 0.10 -	Rated speed rpm : > 100 Check speed 1/min : > 80
rack travel mm : 2.00 - Rated speed rpm : 770 - Tolerance 1/min : + 50 -	FUEL DELIVERY CHARACTERISTICS Aneroid pressure
TORQUE CONTROL	hPa : 1000 Rated speed rpm : 900 Del. quantity
Rated speed rpm : 1200 - rack travel mm : 11.45 - Tolerance mm : + 0.05 -	cm3/1000 strokes : 170.0 Tolerance cm3/1000 strokes : +- 3.0
Rated speed rpm : 900 - rack travel mm : 11.80 - Tolerance mm : + 0.10	Check tolerance cm3/1000s. : +- 6.0 Aneroid pressure
Rated speed rpm : 1100 - rack travel mm : 11.60 -	hPa : - Rated speed rpm : 500 Del. quantity cm3/1000 strokes : 83.0
Rated speed rpm : 700	Tolerance : +- 1.0
rack travel mm : 11.90 Tolerance mm : +- 0.10	- Check tolerance - cm3/1000s. : +- 4.0

STARTING FUEL DELIVERY

Del. quantity cm3/1000 strokes : 215.0

Tolerance

cm3/1000 strokes : +- 15.0

Check tolerance

cm3/1000s. : + 19.0

LOW IDLE

Rated speed rpm 650 rack travel mm 4.80 Tolerance mm : +- 0.20 Del. quantity cm3/1000 strokes : 21.0 Tolerance cm3/1000 strokes 3.0 Check tolerance cm3/1000s. 6.0 Spreed Tolerance cm3/1000 strokes : 8.0 Check tolerance cm3/1000s. 12.0

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

: 06.03.96 Edition Test oil : ISO 4113

Combination No. : 0 402 076 787

Injection pump

Pump designation : PES6P120A720RS3340 EP type number : 0 412 026 773

Governor

Governer design. : RSV400...1050P0A602

Governer no. : 0 421 833 483

Cust. part No. :

Customer-spec. information

Customer : FNH-GEOTECH

Motor : EP040B Power KW : 176.0

TEST BENCH REQUIREMENTS

Inlet line : 4.2

Test oil inlet

temp. °C : 40
Tolerance °C : + 2.0

Overflow valve : 2 417 413 086

Inlet press. bar : 1.5 Tolerance bar : + 0.1

Overflow quantity

min. L/h : 100 Tolerance l/h: +- 20.0

Test nozzle holde

: 1 688 901 103 assembly

Opening pressure

: 208.5 bar Tolerance bar : +- 1.5 Test lines : 1 680 750 089

Outside diameter : 8.0

x inside diameter : 3.0 x length mm : 600

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant.

per values _____

BEGINNING OF DELIVERY

Test pressure bar: , 26.0 Tolerance bar : +- 1.0

Prestroke mm : 3.60 Tolerance mm : + 0.05 Check

tolerance mm : +- 0.10

Rack travel in mm : 10.50 Tolerance mm : + 1.50

Firing order : 1-5-3-6-2-

: 0-60-120-180-240 Phasing

: -300

Tolerance : \leftarrow 0.30

Check

tolerance °NW : + 0.75

Start of delivery blocking

tolerance "NW : +- 0.30

Barrel no. : 1

BASIC SETTING

Rated speed rpm : 1050

Rack travel in mm: 11.25 Tolerance mm: + 0.05 Del. quantity cm3/1000 strokes: 158.0 Tolerance cm3/1000 strokes: + 1.0 Check tolerance cm3/1000s. : + 6.0	Del. quantity cm3/1000 strokes : 158.0 Tolerance cm3/1000 strokes : + 1.0 Check tolerance cm3/1000s. : + 6.0 Spreed Tolerance cm3/1000 strokes : 5.0 Check tolerance cm3/1000s. : 9.0
Spreed Tolerance cm3/1000 strokes : 5.0	CONTROL LEVER
Check tolerance cm3/1000s. : 9.0	position degree : 94.0 RATED SPEED
Rated speed rpm : 400 Rack travel in mm : 5.00	rack travel mm : 0.85 Tolerance mm : + 0.55
Tolerance mm : + 0.20 Del. quantity cm3/1000 strokes : 26.0	Rated speed rpm : 1320 rack travel mm : 4.00
Tolerance - 3.0 - Check tolerance	Rated speed rpm : 1165 ASSEMBLY GOVERNOR SETTING
cm3/10GOS. : +- 6.0 Spreed Tolerance	Rated speed rpm : 1093 rack travel mm : 10.20
cm3/1000 strokes : 8.0 + Check tolerance cm3/1000s. : 12.0 + Check tolerance cm3/1000s.	Rated speed rpm : 1148 Tolerance 1/min : +- 5 rack travel mm : 4.00
(B) SETTING OF INJECTION PUMP WITH GOVERNOR	rack travel mm : 0.85 Tolerance mm : + 0.55 Rated speed rpm : 1320
GUIDE SLEEVE POSITION	Rated speed rpm : 1094 rack travel mm : 10.20
Rated speed rpm : 800	Rated speed rpm : 1149 Tolerance 1/min : + 5
Rack travel in mm: 0.50 Tolerance mm: + 0.20	rack travel mm : 4.00
governor spring pre-tension click setting x : 4.25	Tolerance mm : + 0.55 Rated speed rpm : 1095 rack travel mm : 10.20
FULL LOAD DELIVERY AT FULL LOAD STOP	Rated speed rpm : 1150 Tolerance 1/min : + 5
Rated speed rpm : 1050 Aneroid pressure hPa : 1600	rack travel mm : 4.00 rack travel mm : 0.85 Tolerance mm : +- 0.55

Rated speed rpm	: 1096
rack travel mm	: 10.20
Rated speed rpm	: 1151
Tolerance 1/min	: + 5
rack travel mm	: 4.00
rack travel mm	: 0.85
Tolerance mm	: + 0.55
Rated speed rpm	: 1097
rack travel mm	: 10.20
Rated speed rpm	: 1152
Tolerance 1/min	: +- 5
rack travel mm	: 4.00
rack travel mm	: 0.85
Tolerance mm	: +- 0.55
Rated speed rpm	: 1098
rack travel mm	: 10.20
Rated speed rpm	: 1153
Tolerance 1/min	: + 5
rack travel mm	: 4.00
rack travel mm	: 0.85
Tolerance mm	: ← 0.55
LOW IDLE	
control lever position degree	: 73.0
Setting point w/o	ut bumper spring
Rated speed rpm	: 400
rack travel mm	: 4.50
Testing:	
Rated speed rpm	: 400
rack travel mm	: 5.00
Tolerance mm	: + 0.10
rack travel mm	: 2.00
Rated speed rpm	: 535
Tolerance 1/min	: + 50
TORQUE CONTROL	

Rated speed rpm rack travel mm Tolerance mm	: 700 : 12.40 : + 0.05
Rated speed rpm rack travel mm Tolerance mm	: 600 : 12.50 : + 0.15
ANEROID/ALTITUDE COMPENSATOR TEST	
SETTING	
Rated speed rpm Pressure hPa rack travel mm Tolerance mm	: 500 : 1600 : 12.50 : +- 0.10
MEASUREMENT	
Pressure hPa Rated speed rpm rack travel mm Tolerance mm	: - : 500 : 8.10 : + 0.10
Rated speed rpm	: 500
Pressure hPa rack travel mm Tolerance mm	: 980 : 11.40 : + 0.05
FUEL DELIVERY CHA	RACTERISTICS
Aneroid pressure hPa Rated speed rpm Del. quantity cm3/1000 strokes Tolerance cm3/1000 strokes Check tolerance cm3/1000s.	: 1600 : 700 : 196.0 : + 3.0 : + 6.0
Aneroid pressure hPa Rated speed rpm Del. quantity cm3/1000 strokes Tolerance	: - : 500 : 94.0

1.0

4.0

Tolerance cm3/1000 strokes : +-

Check tolerance cm3/1000s.

STARTING FUEL DELIVERY

Rated speed rpm : 100 rack travel mm : 20.50 Tolerance mm : + 0.50 Del. quantity cm3/1000 strokes : 150.0 Tolerance cm3/1000 strokes : + 15.0 Check tolerance cm3/1000s. : + 19.0

LOW IDLE

400 Rated speed rpm 5.00 rack travel mm Tolerance mm 0.20 Del. quantity cm3/1000 strokes : 26.0 Tolerance 3.0 cm3/1000 strokes Check tolerance cm3/1000s. 6.0 Spreed Tolerance 8.0 cm3/1000 strokes Check tolerance 12.0 cm3/1000S.

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

Edition : 06.03.96 Test oil : ISO 4113

Combination No. : 0 402 646 743

Injection pump

Pump designation : PE6P120A320LS7837-2

EP type number : 0 412 626 943

Governor

Governer design. : RQ300/1100PA1271 Governer no. : 0 421 801 803

Cust. part No. : 0270743102

Customer-spec. information
Customer : MB-NFZ
Motor : 0M441 LA
Power KW : 260.0

TEST BENCH REQUIREMENTS

Inlet line : 3.1

Test oil inlet

temp. °C : 40 Tolerance °C : +- 2.0

Overflow valve : 1 417 413 047

Inlet press. bar : 1.5
Tolerance bar : + 0.1

Overflow quantity

min. l/h : 120 Tolerance l/h : + 20.0

Test nozzle holde

assembly : 1 688 901 019

Opening pressure

bar : 208.5 Tolerance bar : + 1.5 Test lines : 1 680 750 075

Outside diameter : 8.0

x inside diameter: 3.0

x length mm : 1000

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant.

per values ____

BEGINNING OF DELIVERY

Test pressure bar : 26.0 Tolerance bar : + 1.0

Prestroke mm : 5.25
Tolerance mm : + 0.05

Check

tolerance mm : +- 0.10

Rack travel in mm : 20.50 Tolerance mm : + 0.50

Firing order : 6-3-5-2-4-

: 1

: -300

Phasing : 0-60-120-180-240

Tolerance : \leftarrow 0.30

Check

tolerance "NW : + 0.50

Start of delivery mark

Barrel no. : 6

BASIC SETTING

Rated speed rpm : 600

Rack travel in mm: 14.50

Rack travel in mm : 14.50 Tolerance mm : + 0.10

Tolerance mm : \leftarrow 0.05

Del. quantity cm3/1000 strokes : 234.5	guide sleeve travel mm : 6.00 Tolerance mm : +- 0.10
Tolerance cm3/1000 strokes : + 1.0	Rated speed rpm : 1350 guide sleeve
Check tolerance cm3/1000s. : +- 4.0	travel mm : 11.50 Tolerance mm : +- 0.50
Spreed Tolerance cm3/1000 strokes : 6.0	GUIDE SLEEVE POSITION
Check tolerance	Rated speed rpm : 650
cm3/1000s. : 9.0	Rack travel in mm : 20.00 Tolerance mm : + 0.80
Rated speed rpm : 300	
Rack travel in mm: 6.00 Tolerance mm: +- 0.30	FULL LOAD DELIVERY AT FULL LOAD STOP
Del. quantity cm3/1000 strokes : 19.0	Rated speed rpm : 600 Aneroid pressure
Tolerance	hPa : 850
cm3/1000 strokes : +- 3.0 +- Check tolerance +-	Del. quantity cm3/1000 strokes : 234.5
cm3/1000s. : + 6.0 + 5preed	Tolerance cm3/1000 strokes : +- 1.0
Tolerance + cm3/1000 strokes : 6.0 +	Check tolerance cm3/1000S. : +- 4.0
Check tolerance + cm3/1000S. : 10.0 +	Spreed Tolerance
cm3/1000s. : 10.0	cm3/1000 strokes : 6.0
(B) SETTING OF INJECTION PUMP WITH GOVERNOR	Check tolerance cm3/1000S. : 9.0
GUIDE SLEEVE TRAVEL	CONTROL LEVER
Rated speed rpm : 300	control Lever
guide sleeve + travel mm : 1.94 +	position degree : 100.0 tolerance degree : +- 4.0
Tolerance mm : + 0.20	RATED SPEED
Rated speed rpm : 1152	
guide sleeve travel mm : 6.34	rack travel mm : 14.60 Rated speed rpm : 1140
Tolerance mm : + 0.15	Tolerance 1/min : + 8
Rated speed rpm : 1100 + guide sleeve	rack travel mm : 4.00 Rated speed rpm : 1265
travel mm : 6.90	Tolerance 1/min : + 15
Tolerance mm : + 0.10	rack travel mm : 0.75
Rated speed rpm : 431 + guide sleeve + 431	Tolerance mm : + 0.75 Rated speed rpm : 1350
travel mm : 4.71 Tolerance mm : +- 0.10	
Toterance min : 0.10	
Rated speed rpm : 570 +	LOW IDLE

control lever position degree		Check speed 1/min : > 80 Check
tolerance degree	: +- 4.0	+ speed 1/min : < 240
Testing:		FUEL DELIVERY CHARACTERISTICS
Rated speed rpm rack travel mm Tolerance mm	300 5.60 +- 0.10	Aneroid pressure hPa : 1500 Rated speed rpm : 1100
rack travel mm Rated speed rpm Tolerance 1/min	2.00 400 400	Rated speed rpm : 1100 Del. quantity cm3/1000 strokes : 264.0 Tolerance
Rated speed rpm		+ cm3/1000 strokes : + 1.5
CRT mm min.		Check tolerance cm3/1000s. : + 4.5 Spreed
TORQUE CONTROL		Tolerance cm3/1000 strokes : 8.0 Check tolerance
Rated speed rpm rack travel mm Tolerance mm	: 14.50	cm3/1000s. : 12.0 Aneroid pressure hPa : 1500
Rated speed rpm rack travel mm Tolerance mm	: 1100 : 15.60 : + 0.10	Rated speed rpm : 700 Del. quantity cm3/1000 strokes : 262.0 Tolerance
Rated speed rpm rack travel mm Tolerance mm	: 700	cm3/1000 strokes : + 3.0 Check tolerance cm3/1000s. : + 6.0
		Aneroid pressure hPa : -
ANEROID/ALTITUDE COMPENSATOR TEST		Rated speed rpm : 500 Del. quantity cm3/1000 strokes : 151.0
MEASUREMENT		Tolerance cm3/1000 strokes : + 1.0 check tolerance cm3/1000s. : + 4.0
Pressure hPa rack travel mm Tolerance mm	: -4.00	BREAKAWAY
Pressure hPa rack travel mm Tolerance mm	: -1.60	Rack travel in mm: 14.60 Rated speed rpm: 1140 Tolerance 1/min: +- 8
Pressure hPa rack travel mm Tolerance mm	: 1200 : 0.45 : + 0.05	
		STARTING FUEL DELIVERY
START CUT-OUT Rated speed rpm Rated speed rpm	: > 100	Rated speed rpm : 100 Del. quantity cm3/1000 strokes : 250.0
Rated speed rpm	: < 220	+

Tolerance cm3/1000 strokes : +- 10.0 Check tolerance cm3/1000s. : +- 14.0

LOW IDLE

Rated speed rpm 300 rack travel mm 6.00 Tolerance mm : +- 0.30 Del. quantity cm3/1000 strokes : 19.0 Tolerance cm3/1000 strokes : +-3.0 Check tolerance cm3/1000s. 6.0 Spreed Tolerance cm3/1000 strokes : 6.0 Check tolerance cm3/1000s. 10.0

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

: 09,04,92 Edition Test oil : ISO 4113

Combination No. : 0 402 646 955

Injection pump

Pump designation : PE6P12OA320LS7834-1 EP type number : 0 412 626 857

Governor

Governer design. : RQV350...1050PA866

: -13

Governer no. : 0 421 813 954

Cust. part No. :

Customer-spec. information Customer : MB-NFZ Motor : 0M401 LA Power KW : 230.0

TEST BENCH REQUIREMENTS

Inlet line : 3.1

Test oil inlet

temp. °C Tolerance °C : +- 2.0

Overflow valve : 1 419 992 198

Inlet press. bar : 1.5

Overflow quantity

110 min. L/h : 110 Tolerance L/h : + 10.0

Test nozzle holde

: 1 688 901 019 assembly

Opening pressure

: 208.5 bar Tolerance bar : + 1.5 Test lines : 1 680 750 075

Outside diameter : 8.0

x inside diameter :

x length mm : 1000

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant.

per values _____

BEGINNING OF DELIVERY

Test pressure bar : Tolerance bar : +- 1.0

Prestroke mm : 5.55 Tolerance mm : +- 0.05

Check

tolerance mm : +- 0.10

Rack travel in mm: 20.50 Tolerance mm : +- 0.50

Firing order : 6-3-5-2-4-

: 1-

Phasing : 0-60-120-180-240

: -300-360 : + 0.30Tolerance

Check

tolerance "NW : +- 0.50

Start of delivery mark

Barrel no. :

BASIC SETTING

Rated speed rpm : 600

Rack travel in mm: 14.70

Rack travel in mm: 14.70 Tolerance mm : + 0.10
Tolerance mm : + 0.10

Del. quantity cm3/1000 strokes : 223.0	+ Rated speed rpm : 1130 + Rack travel in mm : 17.25
Tolerance cm3/1000 strokes : +- 1.0	+ Tolerance mm : +- 0.75
Check tolerance cm3/1000S. : + 4.0	FULL LOAD DELIVERY AT FULL LOAD STOP
Spreed Tolerance	+ Rated speed rpm : 600 + Aneroid pressure + hPa : 900
cm3/1000 strokes : 5.0	Del. quantity cm3/1000 strokes : 223.0
Check tolerance cm3/1000s. : 9.0	Tolerance cm3/1000 strokes : + 1.0
Rated speed rpm : 350	Check tolerance cm3/1000S. : ← 4.0 Spreed
Rack travel in mm : 5.40	+ Tolerance
Tolerance mm : + 0.30	+ cm3/1000 strokes : 5.0
Del. quantity	+ Check tolerance
cm3/1000 strokes : 19.0 Tolerance	+ cm3/1000s. : 9.0
cm3/1000 strokes : +- 3.0	I
Check tolerance	
cm3/1000s. : + 6.0 Spreed	CONTROL LEVER
Tolerance	+ control lever
cm3/1000 strokes : 6.0	position degree : 121.0
Check tolerance cm3/1000s. : 10.0	tolerance degree : +- 4.0
. 10.0	RATED SPEED
(B) SETTING OF INJECTION PUMP	+ rack travel mm : 13.70
WITH GOVERNOR	+ Rated speed rpm : 1095
	+ Tolerance 1/min : + 5
CUIDE OF EENE TRAVEL	+ rack travel mm : 4.00
GUIDE SLEEVE TRAVEL	Rated speed rpm : 1175
Rated speed rpm : 350	+ Tolerance 1/min : +- 15
guide sleeve	+
travel mm : 1.50	+ rack travel mm : 0.50
Tolerance mm : +- 0.10	+ Tolerance mm : +- 0.50 + Rated speed rpm : 1300
Rated speed rpm : 1200 guide sleeve	T Nated Speed (pill : 1500
travel mm : 8.75	+
Tolerance mm : + 0.25	LOW IDLE
guide sleeve	†
travel mm : 4.10	control lever
Tolerance mm : + 0.20	<pre>position degree : 67.0 tolerance degree : + 4.0</pre>
guide sleeve	+
travel mm : 7.00	+ Testing:
Tolerance mm : + 0.20	Total anal see 770
	Rated speed rpm : 350 rack travel mm : 5.40
GUIDE SLEEVE POSITION	rack travel mm : 5.40 Tolerance mm : + 0.10
	1

Rated speed rpm	: 200	† Tolerance	
CRT man min.	7.70		okes : +- 1.5
cki www will.	: > 7.30	† Check tolera † cm3/1000s.	
Rated speed rpm	: 475	Spreed	• • ••
	•	+ Tolerance	
TORQUE CONTROL		+ Check tolera	
Dahad annad num	: 600	+ cm3/1000s.	: 12.0
Rated speed rpm rack travel mm		Aneroid pres	Clina
Tolerance mm		hPa	: 1800
		+ Rated speed	
Rated speed rpm	: 1050	+ Del. quantit	ý
rack travel mm		+ cm3/1000 str	okes : 243.0
Tolerance mm	: +- 0.10	† Tolerance	okes : +- 2.0
Rated speed rpm	: 800	+ Check tolera	
rack travel mm	: 15.30	+ cm3/1000s.	: +- 5.0
Tolerance mm	: ← 0.10	Spreed	
		+ Tolerance	
A.100.000.000.000.000.000	 		okes : 8.0
ANEROID/ALTITUDE COMPENSATOR TEST		+ Check tolera + cm3/1000S.	
COMPENSATOR TEST		I comprisons.	: 12.0
		Anerold pres hPa Rated speed Del. quantity cm3/1000 stro Tolerance cm3/1000s. Spreed Tolerance cm3/1000 stro Check toleran cm3/1000s. Aneroid press hPa Rated speed Del. quantity cm3/1000 stro Tolerance cm3/1000 stro Check toleran cm3/1000 stro Check toleran cm3/1000 stro Check toleran cm3/1000s.	sure
		+ hPa	: 1800
MEASUREMENT		Rated speed	
	700	+ Del. quantity	
Pressure hPa rack travel mm	: 300 : -3.10	+ cm3/1000 stro + Tolerance	okes : 177.0
Tolerance mm	: +- 0.05	- cm3/1000 stro	okes : +- 2.0
TOCC: GITOC IMIT		+ Check tolerar	
Pressure hPa	: 600	+ cm3/1000s.	
rack travel mm	: -1.10	+ Spreed	
Tolerance mm	: ← 0.10	† Tolerance	d
Pressure hPa	: 1350	+ cm3/1000 stro + Check tolerar	
rack travel mm	: 0.20	cm3/1000s.	: 12.0
Tolerance mm	: + 0.05	-	1210
		+ Aneroid press	sure
		hPa	: -
START CUT-OUT		+ Rated speed r + Del. quantity	
Rated speed rpm	: > 100	- cm3/1000 stro	
Rated speed rpm		Tolerance	13313
		+ cm3/1000 stro	
Check		+ Check tolerar	
speed 1/min	: > 80	+ cm3/1000s.	: +- 4.0
Check speed 1/min	: < 290	+ Spreed + Tolerance	
speed minn	. \ 270	- cm3/1000 stro	okes : 8.0
FUEL DELIVERY CHA	ARACTERISTICS	+ cm3/1000s.	: 12.0
		+	
Aneroid pressure	. 1000	DDEAVALIAV	
hPa Rated speed rpm	: 1800 : 1050	+ BREAKAWAY	
Del. quantity	. 1000	\downarrow	
cm3/1000 strokes	: 235.5	+ Rack travel i	n mm : 13.70
		•	

B02

Rated speed rpm : 1095 Tolerance 1/min : +- 5

STARTING FUEL DELIVERY

Rated speed rpm 100

Del. quantity

cm3/1000 strokes : 260.0

Tolerance

cm3/1000 strokes : + 10.0

Check tolerance cm3/1000s. : +- 14.0

LOW IDLE

Rated speed rpm 350 5.40 rack travel mm Tolerance mm : +- 0.30 Del. quantity cm3/1000 strokes : 19.0 Tolerance cm3/1000 strokes 3.0 Check tolerance

cm3/1000s. Spreed

Tolerance

cm3/1000 strokes : 6.0

6.0

Check tolerance

cm3/1000s. 10.0

Note remarks

Refer to Service Info for test and adjustment instructions.
See microcard(s) W400/...

Edition : 17.01.96 Test oil : ISO 4113

Combination No. : 0 402 646 985

Injection pump

Pump designation : PE6P12OA32ORS7248

: -10Z

EP type number : 0 412 626 901

Governor

Governer design. : RQ275/1150PA987 Governer no. : 0 421 801 578

Cust. part No. : 1248038/4

Customer—spec. information Customer : DAF

Motor : RS 200 L Power KW : 200.0

TEST BENCH REQUIREMENTS

Inlet line : 3.2

Test oil inlet

temp. °C : 40
Tolerance °C : + 2.0

Overflow valve : 1 417 413 025

Inlet press. bar : 1.5
Tolerance bar : + 1.0

Test nozzle holde

assembly : 1 688 901 105

Opening pressure

bar : 208.5 Tolerance bar : + 1.5

Test Lines : 1 680 750 089

Outside diameter : 8.0

x inside diameter: 3.0 x length mm : 600

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant.

per values ____

BEGINNING OF DELIVERY

Test pressure bar : 26.0 Tolerance bar : + 1.0

Prestroke mm : 5.25
Tolerance mm : + 0.05

Check

tolerance mm : + 0.10

Rack travel in mm : 10.50
Tolerance mm : + 0.50

Firing order : 1-5-3-6-2-

: 4

Phasing : 0-60-120-180-240

: -300

Tolerance : +- 0.30

Check

tolerance °NW : + 0.50

Start of delivery mark

Barrel no. : 1

BASIC SETTING

Rated speed rpm : 1000

Rack travel in mm : 11.35 Tolerance mm : + 0.05

Del. quantity

cm3/1000 strokes : 167.0

Tolerance

cm3/1000 strokes : +- 1.0

Check tolerance		1	
cm3/1000s.	: +- 4.0	I control lever	
		+ position degree	
Spreed		+ tolerance degree	: +- 4.0
Tolerance cm3/1000 strokes	; 5,0	T DATES COLES	
CIIDA 1000 STUCKES	: 5.0	RATED SPEED	
Check tolerance		+ rack travel mm	: 10.35
cm3/1000s.	: 9.0	+ Rated speed rpm	: 1207
Rated speed rpm	: 275	† Tolerance 1/min	: +- 8
kared sheed thu	: 275	I rack travel mm	: 4.00
Rack travel in mm	5.40	+ Rated speed rpm	
Tolerance mm	: + 0.10	+ Tolerance 1/min	: +- 15
Del. quantity	44.0	+	0.70
cm3/1000 strokes Tolerance	: 16.0	+ rack travel mm + Tolerance mm	: 0.70 : +- 0.70
cm3/1000 strokes	: +- 3.0	Rated speed rpm	: 1450
Check tolerance		+	
cm3/1000s.	: +- 6.0	+	
Spreed Tolerance		LOW IDLE	
cm3/1000 strokes	: 8.0	I LOW IDEE	
Check tolerance	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	+	
cm3/1000s.	: 12.0	+ control lever	
		+ position degree	74.0
(B) SETTING OF IN	IECTION DUMP	tolerance degree	: +- 4.0
WITH GOVERNOR	AECITOIA FOUL	Testing:	
WITH GOVERNOR		+	
		Rated speed rpm	: 275
		t rack travel mm	4.70
GUIDE SLEEVE POSI	TION	Tolerance mm	: +- 0.10
Rated speed rpm	: 550	rack travel mm	: 2.00
		+ Rated speed rpm	: 340
Rack travel in mm		† Tolerance 1/min	: +- 20
Tolerance mm	: +- 0.60	T Batad anced nam	: 175
		† Rated speed rpm	: 175
FULL LOAD DELIVER	Y AT FULL LOAD STOP	+ CRT mm min.	: > 7.00
	4000	+	
Rated speed rpm Aneroid pressure	: 1000	TORQUE CONTROL	
hPa	: 1000	T TORQUE CONTROL	
Del. quantity		+ Rated speed rpm	: 1000
cm3/1000 strokes	: 167.0	+ rack travel mm	: 11.35
Tolerance		Tolerance mm	: + 0.05
cm3/1000 strokes Check tolerance	: +- 1.0	+ Rated speed rpm	: 1150
cm3/1000S.	: +- 4.0	rack travel mm	
Spreed		+ Tolerance mm	: + 0.10
Tolerance		+	
cm3/1000 strokes	: 5.0	ANEDOTO (AL TYTICE	
Check tolerance		+ ANEROID/ALTITUDE	
cm3/1/1000	• 9 0		
cm3/1000s.	: 9.0	COMPENSATOR TEST	
cm3/100US.	: 9.0		

Rated speed rpm	:	600
Pressure hPa	;	1000
rack travel mm	:	11.35
Tolerance mm	; •	 0.0 5

MEASUREMENT

Pressure hPa	:	_
Rated speed rpm	:	600
rack travel mm	:	9.20
Tolerance mm	: +	- 0.15

Rated	speed	rom	:	600
110000	CHC C C	, 60,11	•	

Pressure hPa	:	340
rack travel mm	:	10.75
Tolerance mm	: +-	0.05

Pressure hPa	:	200
rack travel mm	;	9.70
Tolerance mm	: +-	0.10

FUEL DELIVERY CHARACTERISTICS

Aneroid	pressure
---------	----------

nPa	:	_
Rated speed rpm	:	600
Dol guantity		

Del. quantity

cm3/1000 strokes : 117.0

Tolerance

cm3/1000 strokes : +- 1.0

Check tolerance

cm3/1000s. : +- 4.0

BREAKAWAY

Rack travel in mm : 10.35 Rated speed rpm : 1207
Tolerance 1/min : + 8

LOW IDLE

Rated speed rpm rack travel mm Tolerance mm	: +-	275 5.40 0.10
Del. quantity cm3/1000 strokes Tolerance	:	16.0

cm3/1000 strokes : +- 3.0

Check tolerance cm3/1000s. : +- 6.0 Spreed Tolerance cm3/1000 strokes : 8.0 Check tolerance cm3/1000s. : 12.0

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

: 31,05,95 Edition Test oil : ISO 4113

Combination No. : 0 402 646 988

Injection pump

Pump designation : PE6P120A320RS7230

: -10X

EP type number : 0 412 626 899

Governor

Governer design. : RQV250...1000PA990K

: 0 421 815 274 Governer no.

Cust. part No. : 1250705/4

Customer-spec. information : DAF Customer

: WS 295 L Motor : 295.0 Power KW

TEST BENCH REQUIREMENTS

Inlet line : 3.1

Test oil inlet

temp. °C Tolerance °C : +- 2.0

Overflow valve : 1 417 413 025

Inlet press. bar : 1.5 Tolerance bar : +-

Test nozzle holde

: 1 688 901 105 assembly

Opening pressure

208.5 bar Tolerance bar

Test lines : 1 680 750 089

Outside diameter : 8.0

x inside diameter : 3.0 x length mm :

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant.

per values _____

BEGINNING OF DELIVERY

Test pressure bar : 26.0 Tolerance bar : + 1.0

Prestroke mm : +- 0.05 Tolerance mm

Check

tolerance mm : + 0.10

Rack travel in mm: 10.50 Tolerance mm : + 1.50

: 1-5-3-6-2-Firing order

: 4

Phasing : 0-60-120-180-240

: -300

: +- 0.30 Tolerance

Check

tolerance *NW : + 0.50

Start of delivery mark

Barrel no. 1

BASIC SETTING

980 Rated speed rpm :

Rack travel in mm: 13.95 Tolerance mm : +- 0.05

Del. quantity

cm3/1000 strokes : 259.0

Tolerance

cm3/1000 strokes : +- 1.0

Check tolerance cm3/1000s. : +- 4.0	guide sleeve travel mm : 3.79 Tolerance mm : +- 0.25
Spreed Tolerance	- Rated speed rpm : 1310
cm3/1000 strokes : 5.0	- guide sleeve - travel mm : 13.50
Check tolerance cm3/1000s. 9.0	Tolerance mm : +- 0.50
Rated speed rpm : 250	- GUIDE SLEEVE POSITION
Rack travel in mm: 6.10 Tolerance mm: + 0.10	Rated speed rpm : 1130
Del. quantity	Rack travel in mm : 13.50
cm3/1000 strokes : 17.0 + Tolerance	Tolerance mm : + 1.30
cm3/1000 strokes : +- 3.0 +- Check tolerance +-	FULL LOAD DELIVERY AT FULL LOAD STOP
cm3/1000s. : + 6.0	•
Spreed + Tolerance	- Rated speed rpm : 980 - Aneroid pressure
cm3/1000 strokes : 8.0	hPa : 1500
Check tolerance + 12.0 + 12.0	Del. quantity cm3/1000 strokes : 259.0
	Tolerance
(B) SETTING OF INJECTION PUMP	cm3/1000 strokes : +- 1.0 Check tolerance
WITH GOVERNOR	cm3/1000s. : +- 4.0 Spreed
GUIDE SLEEVE TRAVEL	Tolerance : 5.0
Rated speed rpm : 250	Check tolerance cm3/1000s. : 9.0
guide steeve	cm3/1000s. : 9.0
travel mm : 1.53 + Tolerance mm : + 0.10	
+	CONTROL LEVER
Rated speed rpm : 1038 + guide sleeve +	control lever
travel mm : 9.74 +	position degree : 120.0
Tolerance mm : +- 0.10	tolerance degree : +- 4.0
Rated speed rpm : 686 guide sleeve	RATED SPEED
travel mm : 6.41	rack travel mm : 12.95
Tolerance mm : + 0.25	Rated speed rpm : 1032 Tolerance 1/min : +- 5
Rated speed rpm : 284	mode through mm.
guide sleeve + travel mm : 2.27 +	rack travel mm : 4.00 Rated speed rpm : 1150
Tolerance mm : + 0.25	Tolerance 1/min : +- 15
Rated speed rpm : 334 guide sleeve	rack travel mm : 0.70 Tolerance mm : + 0.70
travel mm : 3.17 +	Rated speed rpm : 1275
Tolerance mm : + 0.25	
Rated speed rpm : 390	LOW IDLE

control lever position degree tolerance degree Testing:	: +- 4.0	Pressure hPa : 730 - rack travel mm : 12.65 - Tolerance mm : +- 0.05 - Pressure hPa : 300 - rack travel mm : 9.70 - Tolerance mm : +- 0.10
Rated speed rpm rack travel mm Tolerance mm	: 5.20	
rack travel mm Rated speed rpm Tolerance 1/min	: 350	FUEL DELIVERY CHARACTERISTICS Aneroid pressure hPa : 1500 Rated speed rpm : 600
Rated speed rpm	: 150	+ Del. quantity
CRT mm min.	: > 7.00	- cm3/1000 strokes : 257.0 Tolerance - cm3/1000 strokes : +- 2.0
TORQUE CONTROL		Check tolerance cm3/1000s. : + 5.0 Spreed
Rated speed rpm rack travel mm Tolerance mm	: 13.95	+ Tolerance + cm3/1000 strokes : 8.0 + Check tolerance
Rated speed rpm rack travel mm		cm3/1000s. : 12.0 Aneroid pressure
Tolerance mm	: - 0.05	+ hPa : - + Rated speed rpm : 600
Rated speed rpm	: 825 : 13.40	+ Del. quantity + cm3/1000 strokes : 165.0
rack travel mm Tolerance mm		Tolerance + cm3/1000 strokes : + 1.0
Rated speed rpm rack travel mm Tolerance mm	: 12.20	Check tolerance cm3/1000s. : +- 4.0
		BREAKAWAY
ANEROID/ALTITUDE COMPENSATOR TEST		Rack travel in mm: 12.95
SETTING		Rated speed rpm : 1032 Tolerance 1/min : + 5
Rated speed rpm Pressure hPa rack travel mm Tolerance mm	: 980 : 1500 : 13.95 : ← 0.05	
MEASUREMENT		LOW IDLE
Pressure hPa Rated speed rpm rack travel mm Tolerance mm	: - : 980 : 8.90 : +- 0.10	Rated speed rpm : 250 rack travel mm : 6.10 Tolerance mm : +- 0.10 Del. quantity
Rated speed rpm	: 980	cm3/1000 strokes : 17.0 Tolerance cm3/1000 strokes : + 3.0

Check tolerance cm3/1000s. : +- 6.0 Spreed Tolerance cm3/1000 strokes : 8.0 Check tolerance cm3/1000s. : 12.0

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

: 05.03.96 Edition : ISO 4113 Test oil

Combination No. : 0 402 648 980

Injection pump

Pump designation : PE8P120A320LS7839

: -10

EP type number : 0 412 628 855

Governor

Governer design. : RQV300...950PA797

: -39

: 0 421 814 115 Governer no.

Cust. part No. : 0250749102

Customer-spec. information : MB-NFZ Customer Motor : 0M442 LA Power KW : 370.0

TEST BENCH REQUIREMENTS

Inlet line : 3.1

Test oil inlet

temp. °C Tolerance °C 2.0

Overflow valve : 1 417 413 047

Inlet press. bar : 1.5 Tolerance bar : +-0.1

Tolerance l/h: + 10.0

Test nozzle holde

: 1 688 901 105 assembly

Opening pressure

: 208.5 bar : +- 1.5 Tolerance bar

Test lines : 1 680 750 075

Outside diameter : 8.0

x inside diameter:

x Length mm : 1000

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant.

per values ____

BEGINNING OF DELIVERY

26.0 Test pressure bar : Tolerance bar : + 1.0

Prestroke mm : 5.05
Tolerance mm : + 0.05 : +- 0.05 Tolerance mm

Check

tolerance mm : +- 0.10

Rack travel in mm: 14.50 Tolerance mm: + 0.50

Firing order : 8-7-2-6-3

: - 5- 4- 1

: 0-45-90-135-180 Phasing : -225-270-315

: +- 0.30 Tolerance

Check

tolerance *NW : **←** 0.75

Start of delivery mark

Barrel no. :

BASIC SETTING

Rated speed rpm : 550

Rack travel in mm : 15.20 Tolerance mm : +- 0.05

Del. quantity

cm3/1000 strokes : 289.0

		→ Tolerance mm : +- 0.25	
Tolerance cm3/1000 strokes	: +- 1.0	Rated speed rpm : 1092 guide sleeve	
Check tolerance cm3/1000s.	: + 4.0	travel mm : 10.00 Folerance mm : +- 0.25	
Spreed Tolerance cm3/1000 strokes	; 6.0	Rated speed rpm : 1190 guide sleeve travel mm : 11.50	
Check tolerance	; 9.0	Tolerance mm : + 0.50	
		GUIDE SLEEVE POSITION	
Rated speed rpm	: 300	Rated speed rpm : 1030	
Rack travel in mo	n: 5.20	+	
Tolerance mm	: +- 0.30	Rack travel in mm: 14.20	
Del. quantity		+ Tolerance mm : + 2.00	
cm3/1000 strokes	: 19.0		
Tolerance	, ,,,,		
cm3/1000 strokes	: +- 3.0	FULL LOAD DELIVERY AT FULL LOAD	STO
	; += 3.0	T FUEL COAD DELIVERY AT FUEL LOAD	3101
Check tolerance		T Bottod annual man	
cm3/1000s.	: +- 6.0	Rated speed rpm : 550	
Spreed		+ Aneroid pressure	
Tolerance		+ hPa : 1200	
cm3/1000 strokes	; 6.0	† Del. quantity	
Check tolerance		+ cm3/1000 strokes : 289.0	
cm3/1000s.	: 10.0	+ Tolerance	
		+ cm3/1000 strokes : +- 1.0	
		- Check tolerance	
(B) SETTING OF IN WITH GOVERNOR	JECTION PUMP	cm3/1000s. : + 4.0 + Spreed	
		Tolerance	
CUIDE OF EDIE TON	<i>i</i>	+ sm3/1000 strokes : 6.0	
GUIDE SLEEVE TRAV	/EL	+ Check tolerance	
Do to all many and more	700	+ cm3/1000s. : 9.0	
Rated speed rpm	: 300	<u>†</u>	
guide sleeve		†	
travel mm	: 1.29		
Tolerance mm	: +- 0.20	+ CONTROL LEVER	
		†	
Rated speed rpm	: 1010	+ control lever	
guide sleeve		+ position degree : 121.0	
travel mm	: 8.56	+ tolerance degree : + 4.0	
Tolerance mm	: +- 0.15	+	
		RATED SPEED	
Rated speed rpm	: 567		
guide sleeve	. 20.	+ rack travel mm : 14.20	
travel mm	: 4.66	+ Rated speed rpm : 995	
	: +- 0.25	+ Tolerance 1/min : + 5	
Tolerance mm	: - 0.2	Forerance minis : +- 3	
		1 00	
Rated speed rpm	: 617	+ rack travel mm : 4.00	
guide sleeve		+ Rated speed rpm : 1095	
travel mm	: 5.23	+ Tolerance 1/min : +- 15	
Tolerance mm	: +- 0.25	+	
		† rack travel mm : 0.75	
Rated speed rpm	: 780	+ Tolerance mm : + 0.75	
guide sleeve			
		+ Rated speed rom : 1250	
travel mm	: 6.31	Rated speed rpm : 1250	

		+
LOW IDLE		START CUT-OUT
control lever position degree tolerance degree	: 82.0 : ← 4.0	Rated speed rpm : > 190 Rated speed rpm : < 220 Check
Testing:		+ speed 1/min : > 170 + Check + speed 1/min : < 240
Rated speed rpm rack travel mm Tolerance mm	: 300 : 5.20 : ← 0.10	speed 1/min : < 240 FUEL DELIVERY CHARACTERISTICS
Rated speed rpm	: 175	Aneroid pressure
CRT mm min.	: > 8.50	hPa : 1200 Rated speed rpm : 950
Rated speed rpm	: 360	Del. quantity cm3/1000 strokes : 271.0 Tolerance
TORQUE CONTROL		cm3/1000 strokes : + 3.0 Check tolerance cm3/1000s. : + 6.0
Rated speed rpm rack travel mm Tolerance mm	: 550 : 15.20 : + 0.05	Aneroid pressure hPa : -
Rated speed rpm rack travel mm Tolerance mm		Rated speed rpm : 500 Del. quantity cm3/1000 strokes : 136.0 Tolerance cm3/1000 strokes : + 1.0
ANEROÍD/ALTITUDE COMPENSATOR TEST		Check tolerance cm3/1000s. : + 4.0 Spreed
SETTING		Tolerance - cm3/1000 strokes : 8.0 - Check tolerance - cm3/1000s. : 12.0
Rated speed rpm Pressure hPa rack travel mm Tolerance mm	: 400 : 1200 : 15.20 : + 0.05	BREAKAWAY
MEASUREMENT		Rack travel in mm: 14.20 Rated speed rpm: 995
Pressure hPa Rated speed rpm rack travel mm Tolerance mm	400 8.25 + 0.15	Tolerance 1/min : + 5
Rated speed rpm	: 400	STARTING FUEL DELIVERY
Pressure hPa rack travel mm Tolerance mm	: 300 : 9.95 : + 0.20	Rated speed rpm : 100 Del. quantity cm3/1000 strokes : 255.0 Tolerance
Pressure hPa rack travel mm Polerance mm	: 500 : 11.65 : + 0.20	cm3/1000 strokes : +- 20.0 Check tolerance cm3/1000s. : +- 24.0

LOW IDLE

Rated speed rpm	:	300
rack travel mm	:	5.20
Tolerance mm	; +-	0.30
Del. quantity		
cm3/1000 strokes	:	19.0
Tolerance		
cm3/1000 strokes	; +	3.0
Check tolerance		
cm3/1000s.	; +-	6.0
Spreed		
Tolerance		
cm3/1000 strokes	:	6.0
Check tolerance		
cm3/1000s.	:	10.0

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

: 17.01.96 Edition : ISO 4113 Test oil

Combination No. : 0 402 676 815

Injection pump

Pump designation : PE6P120A320LS7808-3 EP type number : 0 412 626 870

Governor

Governer design. : RSV500...900P0A535

Governer no. : 0 421 833 387

Cust. part No. : 0230747602

Customer-spec. information Customer : MB-NFZ Motor : OM 441 LA : 236.0 Power KW

TEST BENCH REQUIREMENTS

Inlet line : 3.1

Test oil inlet

temp. °C Tolerance °C

Overflow valve : 1 417 413 025

Inlet press. bar : 1.5 Tolerance bar : + 0.1

Overflow quantity

min. L/h : 110 Tolerance L/h : +- 10.0

Test nozzle holde

: 1 688 901 105 assembly

Opening pressure

208.5 bar Tolerance bar : + 1.5 Test lines : 1 680 750 075

Outside diameter : 8.0

x inside diameter : x Length mm : 1000

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant.

per values ____

BEGINNING OF DELIVERY

26.0 Test pressure bar : Tolerance bar : +- 1.0

Prestroke mm : 5.25 : +- 0.05 Check

tolerance mm : \leftarrow 0.10

Rack travel in mm: 20.50 Tolerance mm : \leftarrow 0.50

: 6-3-5-2-4-Firing order : 1

: 0-60-120-180-240 Phasing

: -300 : +- 0.30 Tolerance

Check

tolerance "NW : + 0.50

Start of delivery mark

Barrel no. : 6

BASIC SETTING

Rated speed rpm : 088

Rack travel in mm: 14.50 Tolerance mm : \leftarrow 0.05

Del. quantity

cm3/1000 strokes : 229.0

+	
Tolerance cm3/1000 strokes : + 1.0	CONTROL LEVER
Check tolerance cm3/1000s. : +- 4.0	control lever position degree : 82.0
Spreed Tolerance cm3/1000 strokes : 6.0	tolerance degree : +- 4.0
Check tolerance cm3/1000s. : 9.0	LOW IDLE
Rated speed rpm : 500	
Rack travel in mm: 4.60 Tolerance mm: + 0.30 Del. quantity	control lever position degree : 69.0 tolerance degree : +- 4.0
cm3/1000 strokes : 19.0	Testing:
cm3/1000 strokes : +- 3.0 Check tolerance cm3/1000s. : +- 6.0	Rated speed rpm : 500 rack travel mm : 4.60 Tolerance mm : + 0.10
Spreed Tolerance cm3/1000 strokes: 8.0 Check tolerance	rack travel mm : 2.00 Rated speed rpm : 530 Tolerance 1/min : +- 30
cm3/1000s. : 12.0	Rated speed rpm : 100
(B) SETTING OF INJECTION PUMP WITH GOVERNOR	CRT mm min. :> 19.50 SET IDLE AUXILIARY SPRING
GUIDE SLEEVE POSITION	rack travel mm : 2.00
Rated speed rpm : 800	TORQUE CONTROL
Rack travel in mm: 0.50 Tolerance mm: + 0.20	Rated speed rpm : 880 rack travel mm : 14.50 Tolerance mm : + 0.05
FULL LOAD DELIVERY AT FULL LOAD STOP	Rated speed rpm : 700 rack travel mm : 14.50
Rated speed rpm : 880 Aneroid pressure	Tolerance mm : + 0.10
hPa : 1200 + Del. quantity cm3/1000 strokes : 229.0 + Tolerance cm3/1000 strokes : +- 1.0 +	ANEROID/ALTITUDE COMPENSATOR TEST
Check tolerance cm3/1000s. : +- 4.0	MEASUREMENT
Spreed Tolerance cm3/1000 strokes : 6.0 Check tolerance	Pressure hPa : - Rated speed rpm : 500
cm3/1000s. : 9.0	Pressure hPa : 400

rack travel mm	: 1.65
Tolerance mm	: +- 0.05
Pressure hPa	: 600
rack travel mm	: 3.30
Tolerance mm	: + 0.10
FUEL DELIVERY CH	ARACTERISTICS

Aneroid pressure	
hPa	: 1200
Rated speed rpm	: 700
Del. quantity	
cm3/1000 strokes	: 229.0
Tolerance	
cm3/1000 strokes	: +- 3.0
Check tolerance	
cm3/1000s.	: +~ 6.0
A.	
Aneroid pressure	
hPa	: -
Rated speed rpm	: 500
Del. quantity	
cm3/1000 strokes	: 146.0
Tolerance	
cm3/1000 strokes	: +- 1.0
Check tolerance	
cm3/1000s.	: +- 4.0
Spreed	
- :	

STARTING FUEL DELIVERY

Rated speed rpm	:	100
Del. quantity cm3/1000 strokes	:	250.0
Tolerance cm3/1000 strokes	: +-	- 10.0
Check tolerance	•	
cm3/1000s.	: +-	- 14.0

cm3/1000 strokes : 8.0

: 12.0

LOW IDLE

Tolerance

Check tolerance cm3/1000s.

Rated speed rpm	:	500
rack travel mm	:	4.60
Tolerance mm	: +-	0.30
Del. quantity		
cm3/1000 strokes	:	19.0

Tolerance		
cm3/1000 strokes	: +	3.0
Check tolerance		
cm3/1000S.	: +-	6.0
Spreed		
Tolerance		
cm3/1000 strokes	:	8.0
Check tolerance		
cm3/1000s.	:	12.0

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

Edition : 05.03.96 : ISO 4113 Test oil

Combination No. : 0 402 678 821

Injection pump

Pump designation : PE8P120A320LS7860-1 EP type number : 0 412 628 871

Governor

Governer design. : RSV350...1050P0A535

: -11

: 0 421 833 391 Governer no.

Cust. part No. : 0210749302

Customer-spec. information Customer : MB-NFZ Motor : OM 402 LA : 280.0 Power KW

TEST BENCH REQUIREMENTS

Inlet line : 3.1

Test oil inlet

temp. °C Tolerance °C

Overflow valve : 1 417 413 025

Inlet press. bar : 1.5

Overflow quantity

110 min. L/h Tolerance l/h : ← 10.0

Test nozzle holde

: 1 688 901 105 assembly

Opening pressure

208.5 bar : +- 1.5 Tolerance bar

Test lines : 1 680 750 075

Outside diameter : 8.0

x inside diameter : x length mm : 1000

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant.

per values _____

BEGINNING OF DELIVERY

Test pressure bar : 26.0 Tolerance bar : +- 1.0

Prestroke mm Tolerance mm : +- 0.05 Check

tolerance mm : \leftarrow 0.10

Rack travel in mm: 20.50 Tolerance mm : + 0.50

: 8-7-2-6-3 Firing order : - 5- 4- 1

: 0-45-90-135-180 Phasing : -225-270-315

Tolerance : +- 0.50

Check

tolerance °NW : +- 0.50

Start of delivery mark

Barrel no.

BASIC SETTING

Rated speed rpm : 1030

Rack travel in mm: 12.85 Tolerance mm : +- 0.05

Del. quantity

cm3/1000 strokes : 207.0

Tolerance + 1.0 +	
	CONTROL LEVER
Check tolerance cm3/1000s. : + 4.0	control lever position degree : 99.0
Spreed Tolerance cm3/1000 strokes : 6.0	tolerance degree : +- 4.0
Check tolerance cm3/1000s. : 9.0	LOW IDLE
Rated speed rpm : 350	
Rack travel in mm: 5.00 Tolerance mm: +- 0.30	control lever position degree : 74.0 tolerance degree : +- 4.0
Del. quantity cm3/1000 strokes : 13.0 Tolerance	Testing:
cm3/1000 strokes : + 3.0	Rated speed rpm : 350 rack travel mm : 5.00
Check tolerance cm3/1000s. : + 6.0	Tolerance mm : + 0.10
Spreed Tolerance	rack travel mm : 2.00
cm3/1000 strokes : 8.0 Check tolerance	Rated speed rpm : 405 Tolerance 1/min : +- 30
cm3/1000s. : 12.0 +	Rated speed rpm : 100
(B) SETTING OF INJECTION PUMP	CRT mm min. : > 19.50
	SET IDLE AUXILIARY SPRING
GUIDE SLEEVE POSITION	Rated speed rpm : 100
Rated speed rpm : 800	TORQUE CONTROL
Rack travel in mm: 0.50 Tolerance mm: + 0.20	Rated speed rpm : 1030 rack travel mm : 12.85 Tolerance mm : +- 0.05
FULL LOAD DELIVERY AT FULL LOAD STOP	Rated speed rpm : 700 rack travel mm : 13.50
Rated speed rpm : 1030 Aneroid pressure hPa : 1200	Tolerance mm : +- 0.10 Rated speed rpm : 900
Del. quantity	rack travel mm : 13.30
cm3/1000 strokes : 207.0	Tolerance mm : + 0.10
cm3/1000 strokes : + 1.0 + Check tolerance	ANEROID/ALTITUDE
cm3/1000s. : + 4.0 + 5preed	COMPENSATOR TEST
Tolerance cm3/1000 strokes : 6.0	MC A CLIDCÍNCAIT
Check tolerance cm3/1000s. : 9.0	MEASUREMENT
+	Pressure hPa : -

Rated speed rpm	: 400
Pressure hPa	: 350
rack travel mm	: 0.75
Tolerance mm	: +- 0.20
Pressure hPa	: 650
rack travel mm	: 2.10
Tolerance mm	: + 0.15

FUEL DELIVERY CHARACTERISTICS

Aneroid pressure		
hPa	:	1200
Rated speed rpm	:	700
Del. quantity		
cm3/1000 strokes	:	234.0
Tolerance		
cm3/1000 strokes	: -	⊢ 2,0
Check tolerance		
cm3/1000s.	: -	 5.0
Spreed		
Tolerance		
cm3/1000 strokes	:	8.:0
Check tolerance		
cm3/1000s.	:	12.0
Amanadal managemen		

Aneroid pressure			
hPa	:		_
Rated speed rpm	:		500
Del. quantity			
cm3/1000 strokes	:		135.0
Tolerance			
cm3/1000 strokes	•	+	1.0
Check tolerance			
cm3/1000s.	:	+-	4.0
Spreed			
Tolerance			
cm3/1000 strokes	:		8.0
Check tolerance			
cm3/1000s.	:		12.0

STARTING FUEL DELIVERY

Rated speed rpm		700
Del. quantity cm3/1000 strokes	:	210.0
Tolerance cm3/1000 strokes	: +-	- 10.0
Check tolerance cm3/1000s.	•	- 14.0
(11)37 (0003.		14.0

LOW IDLE

Rated speed rpm	: 350
rack travel mm	: 5.00
Tolerance mm	: ← 0.30
Del. quantity	
cm3/1000 strokes	: 13.0
Tolerance	
cm3/1000 strokes	: +- 3.0
Check tolerance	
cm3/1000s.	: +- 6.0
Spreed	
Tolerance	
cm3/1000 strokes	: 8.0
	. 0.0
Check tolerance	40.0
cm3/1000s.	: 12.0

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

Edition : 15.09.95 Test oil : ISO 4113

Combination No. : 0 402 696 801

Injection pump

Pump designation : PE6P120A720RS7211

: -10

EP type number : D 412 626 931

Governor

Governer design. : RE30

Governer no. : 0 421 890 009

: 1328037 Cust. part No.

Customer-spec. information : SCANIA Customer

: DTC1102, DSC1170 Motor

TEST BENCH REQUIREMENTS

Inlet line : 4.1

Test oil inlet

temp. °C 40 Tolerance °C : +- 2.0

Overflow valve : 1 417 413 025

2.5 Inlet press. bar Tolerance bar 0.1

Tolerance l/h : +- 20.0

Test nozzle holde

: 1 688 901 104 assembly

Opening pressure

251.5 Tolerance bar : +- 1.5

Test lines : 1 680 750 008 Outside diameter : 6.0

x inside diameter : 2.0

x length mm : 600

REMARKS

Pump-specific values in Section (B) must be observed!

(A) INJECTION PUMP SETTINGS No basic setting.

Setting of constant delivery

under Section C.

BEGINNING OF DELIVERY

Test pressure bar : 26.0 Tolerance bar : +-1.0

Prestroke mm : 5.05

5.05 Prestroke mm : : +- 0.05 Tolerance mm Tolerance mm : +- 0.05 Check

: + 0.10tolerance mm Check

: + - 0.10tolerance mm

Rack travel in mm : 10.50

Rack travel in mm: 10.50 Tolerance mm : + 1.50 : + 1.50 Tolerance mm

Firing order : 1-5-3-6-2-

: 4

: 0-60-120-180-240 Phasing

: -300

: + 0.30Tolerance

Check

: +- 0.50 tolerance "NW

Start of delivery mark

Tolerance : **←** 0.50

Check

tolerance "NW : + 0.75

Barrel no. : 1 Vibration damper (RoBo diaphragm) : 3.1 (B) POSITIONER TESTING Warm-up time: 3 minutes at n=600 min-1, Uact = 2.5 VTESTING & SETTING RACK TRAVEL SENSOR POSITION Engine speed min-1: Setting point (P, R and H pump) Uact V 3,100 : 13.00 CRT mm Tolerance mm : +/- 0.05 Check : +/- 0.10 tolerance mm Check value (P, R and H pump) Uact V 1.700 CRT mm 6.15 Tolerance mm : +/- 0.25 Check : +/- 0.30tolerance mm Setting point (M pump) Uact V 3,100 CRT mm 12.50 Tolerance mm : +/- 0.05 Check : +/- 0.10 tolerance mm Check value (amua M) Uact V 1.700 : CRT mm 5.50 Tolerance mm : +/- 0.25 Check : +/- 0.30tolerance mm Stop position Uact V : Value with

deenergised adjusting magnet and control rod in stop position.

0.75 CRT mm : +/- 0.25 Tolerance mm

Check

tolerance mm : +/- 0.35

ENGINE-SPEED SENSOR (ALL P and R pumps not H and M pumps)

Test with control rod in stop position

Engine speed min-1: 60 Amplitude V 1.4 : +/- 0.6 Tolerance V Check

: +/- 1.20 tolerance V

Engine speed min-1: 600

Difference Amplitude to

Amplitude V : max.1.4

(C) INJECTION PUMP WITH POSITIONER

TEST POINT V1

700 Rated speed rpm 3.000 Uact V Del. quantity cm3/1000 strokes : 248.0 Tolerance cm3/1000 strokes : +-Check tolerance cm3/1000s. 4.0 Spreed Tolerance cm3/1000 strokes : 8.0 Check tolerance cm3/1000s. 12.0

FUEL DELIVERY CHARACTERISTICS

Rated speed rpm 950 3.000 Uact V Del. quantity cm3/1000 strokes : 224.0 Tolerance cm3/1000 strokes : +-4.0

Check tolerance

cm3/1000s. 6.0

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

: 15.09.95 Edition : ISO 4113 Test oil

Combination No. : 0 402 696 803

Injection pump

Pump designation : PE6P120A720RS7211 EP type number : 0 412 626 838

Governor

Governer design. : RE30

: 0 421 890 019 Governer no.

Cust. part No. : 1370681

Customer-spec. information Customer : SCANIA

: DSC1122,DTC1102 Motor

TEST BENCH REQUIREMENTS

Inlet line : 4.1

Test oil inlet

temp. °C Tolerance °C 2.0

: 1 417 413 025 Overflow valve

Inlet press. bar : 2.5 Tolerance bar

Tolerance L/h : +- 20.0

Test nozzle holde

: 1 688 901 104 assembly

Opening pressure

251.5 bar 1.5 Tolerance bar

Test Lines : 1 680 750 008

Outside diameter : 6.0

x inside diameter: 2.0 x length mm 600

REMARKS

Pump-specific values in Section (B) must be observed!

(A) INJECTION PUMP SETTINGS No basic setting.

Setting of constant delivery

under Section C.

BEGINNING OF DELIVERY

Test pressure bar : 26.0 Tolerance bar : +-1.0

5.05 Prestroke mm :

5.05 Prestroke mm : + 0.05Tolerance mm Tolerance mm : +- 0.05

Check tolerance mm

: ← 0.10 Check : +- 0.10

tolerance mm

Rack travel in mm: 10.50

Rack travel in mm: 10.50 Tolerance mm : + 1.50 : +- 1.50 Tolerance mm

Firing order : 1-5-3-6-2-

Phasing : 0-60-120-180-240

: -300

Tolerance : + - 0.30

Check

tolerance °NW : + 0.50

Start of delivery mark

Tolerance : + - 0.50

Check

tolerance °NW : +- 0.75

Barrel no. Vibration damper (RoBo diaphragm) : 3.1 (B) POSITIONER TESTING Warm-up time: 3 minutes at n=600 min-1, Uact = 2.5 VTESTING & SETTING RACK TRAVEL SENSOR POSITION Engine speed min-1: 0 Setting point (P, R and H pump) Uact V 3.100 13.00 CRT mm : +/- 0.05 Tolerance mm Check : +/- 0.10 tolerance mm Check value (P, R and H pump) 1.700 Uact V 6.15 CRT mm : +/- 0.25 Tolerance mm Check : +/- 0.30tolerance mm Setting point (M pump) Uact V 3.100 CRT mm 12.50 Tolerance mm : +/- 0.05 Check tolerance mm : +/- 0.10 Check value (amua M) 1,700 Uact V CRT mm 5.50 : +/- 0.25 Tolerance mm Check : +/- 0.30 tolerance mm Stop position : Value with Uact V

deenergised adjusting magnet

and control rod in stop position. 0.75 CRT mm : +/- 0.25 Tolerance mm Check : +/- 0.35 tolerance mm ENGINE-SPEED SENSOR (All P and R pumps not H and M pumps) Test with control rod in stop position Engine speed min-1: 60 Amplitude V 1.4 : +/- 0.6 Tolerance V Check tolerance V : +/- 1.20 Engine speed min-1: 600 Difference Amplitude to : max.1.4 Amplitude V (C) INJECTION PUMP WITH POSITIONER TEST POINT V1 Rated speed rom 700 Uact V 3,000 Del. quantity cm3/1000 strokes : 248.0 Tolerance cm3/1000 strokes : +- 1.0 Check tolerance cm3/1000s. : +-4.0 Spreed Tolerance cm3/1000 strokes : 8.0 Check tolerance cm3/1000s. 12.0 FUEL DELIVERY CHARACTERISTICS Rated speed rpm : 950 Uact V 3.000 Del. quantity cm3/1000 strokes : 224.0 Tolerance cm3/1000 strokes : +-

6.0

Check tolerance

cm3/1000s.



Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

Edition : 15.09.95 : ISO 4113 Test oil

Combination No. : 0 402 696 804

Injection pump

Pump designation : PE6P12OA72ORS7355 EP type number : 0 412 626 933

Governor

Governer design. : RE30

: 0 421 890 022 Governer no.

: 1370672 Cust. part No.

Customer-spec. information : SCANIA Customer

: DSC1122,DTC1102 Motor

TEST BENCH REQUIREMENTS

Inlet line : 4.1

Test oil inlet

temp. °C 40 Tolerance °C

: 1 417 413 025 Overflow valve

Inlet press. bar : 2.5 Tolerance bar 0.1

Tolerance l/h : + 20.0

Test nozzle holde

: 1 688 901 104 assembly

Opening pressure

251.5 Tolerance bar

: 1 680 750 008 Test lines

Outside diameter :

x inside diameter: 2.0 x length mm : 600

REMARKS

Pump-specific values in Section (B) must be observed!

(A) INJECTION PUMP SETTINGS

No basic setting.

Setting of constant delivery

under Section C.

BEGINNING OF DELIVERY

Test pressure bar : Tolerance bar : + 1.0

: 5.05 Prestroke mm

5.05 Prestroke mm : +- 0.05 Tolerance mm Tolerance mm : + 0.05

Check

: +- 0.10 tolerance mm

Check

tolerance mm : + 0.10

Rack travel in mm: 10.50

Rack travel in mm: 10.50 Tolerance mm : +- 1.50
Tolerance mm : +- 1.50

: 1-5-3-6-2-Firing order

: 0-60-120-180-240 Phasing

: -300

: +- 0.30 Tolerance

Check

tolerance *NW : + 0.50

Start of delivery mark

Tolerance : +- 0.50

Check

tolerance °NW : +- 0.75

and control rod in stop position. Vibration CRT mm 0.75 damper : +/- 0.25 Tolerance mm (RoBo diaphragm) : 3.1 Check : +/- 0.35 tolerance mm (B) POSITIONER TESTING ENGINE-SPEED SENSOR Warm-up time: 3 minutes at (All P and R pumps not n=600 min-1, Uact = 2.5 VH and M pumps) Test with control rod TESTING & SETTING RACK TRAVEL SENSOR in stop position POSITION Engine speed min-1: 60 Engine speed min-1: Amplitude V : 1.4 Tolerance V : +/- 0.6 Setting point Check : +/- 1,20 (P, R and H pump) tolerance V Uact V 3.100 Engine speed min-1: 600 13.00 CRT mm Difference : +/- 0.05 Tolerance mm Amplitude to Amplitude V Check : max.1.4 tolerance mm : +/- 0.10 Check value (C) INJECTION PUMP WITH POSITIONER (P, R and H pump) TEST POINT V1 1.700 Uact V : 700 CRT mm 6.15 Rated speed rpm : : +/- 0.25 Uact V 3,000 Tolerance mm : Del. quantity Check : +/- 0.30 cm3/1000 strokes : 248.0 tolerance mm Tolerance cm3/1000 strokes : +-1.0 Setting point Check tolerance cm3/1000s. (amua M) 4.0 Spreed 3.100 Tolerance Uact V cm3/1000 strokes : 12.50 CRT mm 8.0 : +/- 0.05 Tolerance mm Check tolerance cm3/1000s. 12.0 Check : +/- 0.10 tolerance mm FUEL DELIVERY CHARACTERISTICS Check value Rated speed rpm 950 (amua M) Uact V 3.000 1.700 Del. quantity Uact V cm3/1000 strokes : CRT mm 5.50 224.0 : +/- 0.25 Tolerance Tolerance mm cm3/1000 strokes : +- 4.0Check : +/- 0.30 Check tolerance tolerance mm cm3/1000s. : +-6.0 Stop position : Value with Uact V deenergised adjusting magnet

Barrel no.

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

: 15.09.95 Edition : ISO 4113 Test oil

Combination No. : 0 402 698 802

Injection pump

Pump designation : PE8P12OA92O/4LS7149

EP type number : 0 412 628 826

Governor

Governer design. : RE30

Governer no. : 0 421 890 007

Cust. part No. : 397567

Customer-spec. information : SCANIA Customer : DSC1404 Motor

TEST BENCH REQUIREMENTS

: 4.1 Inlet line

Test oil inlet

40 temp. °C Tolerance °C

Overflow valve : 1 417 413 025

1.5 Inlet press. bar : Tolerance bar 0.1

Tolerance L/h : +- 20.0

Test nozzle holde

: 1 688 901 019 assembly

Opening pressure

208.5 bar 1.5 Tolerance bar

Test lines : 1 680 750 015 Outside diameter : 6.0

x inside diameter: 3.0 x length mm : 600

z

REMARKS

Pump-specific values in Section (B) must be observed!

(A) INJECTION PUMP SETTINGS No basic setting. Setting of constant delivery under Section C.

BEGINNING OF DELIVERY

Test pressure bar : Tolerance bar : + 1.0

5.05 Prestroke mm :

Prestroke mm 5.05 : : +- 0.05 Tolerance mm Tolerance mm : + 0.05

Check : +- 0.10 tolerance mm Check

: +- 0.10 tolerance mm

Rack travel in mm: 10.50

10.50 Rack travel in mm : Tolerance mm : +- 1.50 : + 1.50 Tolerance mm

Firing order : 1-2-7-3-4 : - 5- 6- 8

: 0-45-90-135-180 Phasing : -225-270-315

: **←** 0.30 Tolerance

Check

tolerance °NW : +- 0.50

Start of delivery mark

Tolerance : +- 0.50

Check

tolerance °NW : +- 0.75

Barrel no. : 1 and control rod in stop position. Vibration 0.75 CRT mm damper Tolerance mm : +/- 0.25 (RoBo diaphragm) : 3.2 Check : +/- 0.35 tolerance mm ENGINE-SPEED SENSOR (B) POSITIONER TESTING (All P and R pumps not Warm-up time: 3 minutes at n=600 min-1, Uact = 2.5 VH and M pumps) Test with control rod TESTING & SETTING RACK TRAVEL SENSOR in stop position POSITION Engine speed min-1: 60 Engine speed min-1: Amplitude V 0 1.4 Tolerance V : +/- 0.6 Setting point Check : +/- 1.20 (P, R and H pump) tolerance V Uact V 3.100 600 Engine speed min-1: Difference CRT mm 13.00 : +/- 0.05 Tolerance mm Amplitude to Amplitude V Check : max.1.4 tolerance mm : +/- 0.10 Check value (P, R and H pump) (C) INJECTION PUMP WITH POSITIONER TEST POINT V1 1.700 Uact V 6.15 700 CRT mm Rated speed rpm 3.180 : +/- 0.25 Uact V Tolerance mm Del. quantity Check : +/- 0.30 cm3/1000 strokes : 227.0 tolerance mm Tolerance cm3/1000 strokes : +-Check tolerance Setting point cm3/1000s. (amua M) Spreed 3.100 Tolerance Uact V 12.50 cm3/1000 strokes : CRT mm Tolerance mm : +/- 0.05 Check tolerance cm3/1000s. Check tolerance mm : +/- 0.10 FUEL DELIVERY CHARACTERISTICS Check value (amua M) Rated speed rpm : 950 Uact V 3.180 1.700 Uact V Del. quantity cm3/1000 strokes : 5.50 220.0 CRT mm Tolerance mm : +/- 0.25 Tolerance cm3/1000 strokes : +-Check : +/- 0.30Check tolerance tolerance mm cm3/1000s. : +-6.0 Stop position : Value with Uact V

deenergised adjusting magnet

1.0

6.0

9.0



Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

: 27.09.95 Edition : ISO 4113 Test oil

Combination No. : 0 402 698 804

Injection pump

Pump designation : PE8P120A720LS7205

: -10

EP type number : 0 412 628 895

Governor

Governer design. : RE30

: 0 421 890 007 Governer no.

Cust. part No. : 1328039

Customer-spec. information : SCANIA Customer

Motor : DSC1409, DSC1416

TEST BENCH REQUIREMENTS

Inlet line : 4.1

Test oil inlet

temp. °C Tolerance *C : **←** 2.0

Overflow valve : 1 417 413 025

Inlet press. bar : 2.5 Tolerance bar : +-0.1

Tolerance l/h: + 20.0

Test nozzle holde

: 1 688 901 104 assembly

Opening pressure

bar 251.5 Tolerance bar : +- 1.5

Test lines : 1 680 750 008

Outside diameter : 6.0

x inside diameter : 2.0

x length mm : 600

REMARKS

Pump-specific values in Section (B) must be observed!

(A) INJECTION PUMP SETTINGS

No basic setting.

Setting of constant delivery

under Section C.

BEGINNING OF DELIVERY

Test pressure bar: Tolerance bar $: \leftarrow 1.0$

5.05 Prestroke mm :

: Prestroke mm 5.05 Tolerance mm : + 0.05: + 0.05Tolerance mm

Check

: + - 0.10tolerance mm

Check

tolerance mm : +- 0.10

Rack travel in mm: 10.50

Rack travel in mm: 10.50 Tolerance mm : +- 1.50

: +- 1.50 Tolerance mm

firing order : 1-2-7-3-4

: - 5- 6- 8

Phasing : 0-45-90-135-180 : -225-270-315

Tolerance : + 0.30

Check

: **←** 0.50 tolerance °NW

Start of delivery mark

Tolerance : + 0.50

Check Uact V tolerance 'NW : +- 0.75 : Value with deenergised adjusting magnet 1 Barrel no. and control rod in stop position. Vibration CRT mm 0.75 : +/- 0.25damper Tolerance mm (RoBo diaphragm) : 3.2 Check tolerance mm : +/- 0.35 (B) POSITIONER TESTING ENGINE-SPEED SENSOR Warm-up time: 3 minutes at (All P and R pumps not n=600 min-1, Uact = 2.5 VH and M pumps) Test with control rod TESTING & SETTING RACK TRAVEL SENSOR in stop position POSITION Engine speed min-1: 60 0 Amplitude V Engine speed min-1: 1.4 Tolerance V : +/- 0.6 Setting point Check (P, R and H pump) : +/- 1.20 tolerance V Uact V 3.100 600 Engine speed min-1: 13.00 CRT mm Difference : +/- 0.05 Amplitude to Tolerance mm : max.1.4 Amplitude V Check : +/- 0.10tolerance mm Check value (C) INJECTION PUMP WITH POSITIONER (P, R and H pump) TEST POINT V1 Uact V 1.700 CRT mm 6.15 Rated speed rpm 700 Tolerance mm : +/- 0.25 Uact V 3.000 Del. quantity Check : +/- 0.30248.0 cm3/1000 strokes : tolerance mm Tolerance cm3/1000 strokes : +-1.0 Setting point Check tolerance cm3/1000s. (dmuq M) Spreed Uact V 3.100 Tolerance 12.50 cm3/1000 strokes : CRT mm : +/- 0.05 Check tolerance Tolerance mm 12.0 cm3/1000s. Check : +/- 0.10tolerance mm FUEL DELIVERY CHARACTERISTICS Check value 950 Rated speed rpm (M pump) : 3.000 Uact V 1.700 Del. quantity Uact V 5.50 cm3/1000 strokes : 224.0 CRT mm Tolerance mm : +/- 0.25 Tolerance Check cm3/1000 strokes : +-4.0 tolerance mm : +/- 0.30Check tolerance cm3/1000s. : +-6.0 Stop position

4.0

8.0

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

: 27,09,95 Edition Test oil : ISO 4113

Combination No. : 0 402 698 806

Injection pump

Pump designation : PE8P120A720LS7331

: -10

EP type number : 0 412 628 896

Governor

Governer design. : RE30

: 0 421 890 022 Governer no.

Cust. part No. : 1362097

Customer-spec. information Customer : SCANIA

: DSC1409, DSC1416 Motor

TEST BENCH REQUIREMENTS

: 4.1 Inlet line

Test oil inlet

temp. °C Tolerance °C 2.0

Overflow valve : 1 417 413 025

Inlet press. bar : Tolerance bar 0.1

Test nozzle holde

: 1 688 901 104 assembly

Opening pressure

251.5 bar Tolerance bar : +- 1.5

Test lines : 1 680 750 008

Outside diameter : 6.0 x inside diameter : 2.0 x length mm : 600

REMARKS

Pump-specific values in Section (B) must be observed!

(A) INJECTION PUMP SETTINGS

No basic setting.

Setting of constant delivery

under Section C.

BEGINNING OF DELIVERY

26.0 Test pressure bar : Tolerance bar : +-1.0

: 5.05 Prestroke mm

5.05 Prestroke mm : +- 0.05 Tolerance mm : +- 0.05 Tolerance mm

Check

: + 0.10tolerance mm

Check

: + 0.10tolerance mm

Rack travel in mm : 10.50

Rack travel in mm : 10.50 Tolerance mm : + 1.50 : + 1.50 Tolerance mm

: 1-2-7-3-4 Firing order

: - 5- 6- 8

: 0-45-90-135-180 Phasing : -225-270-315

Tolerance : + 0.30

Check

: + - 0.50tolerance *NW

Start of delivery mark

: +- 0.50Tolerance

Check

tolerance °NW : +- 0.75

: 1 Barrel no.

Vibration

damper

(RoBo diaphragm) : 3.2

(B) POSITIONER TESTING Warm-up time: 3 minutes at n=600 min-1, Uact = 2.5 V

TESTING & SETTING RACK TRAVEL SENSOR POSITION

Engine speed min-1: 0

Setting point (P, R and H pump)

Uact V 3.100 CRT mm 13.00 : +/- 0.05 Tolerance mm

Check

tolerance mm : +/- 0.10

Check value (P, R and H pump)

1.700 Uact V 6.15 CRT mm : +/- 0.25 Tolerance mm Check

: +/- 0.30tolerance mm

Setting point (dmuq M)

3.100 Uact V CRT mm 12.50 : +/- 0.05 Tolerance mm Check

: +/- 0.10 tolerance mm

Check value (m pump)

1.700 Uact V CRT mm 5.50 Tolerance mm : +/- 0.25

Check

: +/- 0.30 tolerance mm

Stop position

Uact V : Value with

deenergised adjusting magnet and control rod in

stop position.

CRT mm 0.75 Tolerance mm : +/- 0.25

Check

: +/- 0.35 tolerance mm

ENGINE-SPEED SENSOR (All P and R pumps not H and M pumps)

Test with control rod in stop position

Engine speed min-1: 60 Amplitude V 1.4 Tolerance V : +/- 0.6 Check

: +/- 1.20 tolerance V

Engine speed min-1: 600

Difference Amplitude to

Amplitude V : max.1.4

(C) INJECTION PUMP WITH POSITIONER

TEST POINT V1

700 Rated speed rpm : Uact V 3.000 Del. quantity

cm3/1000 strokes : 248.0 Tolerance

cm3/1000 strokes : +-Check tolerance

cm3/1000s.

4.0 Spreed

Tolerance

cm3/1000 strokes : 8.0

Check tolerance

cm3/1000s. 12.0

FUEL DELIVERY CHARACTERISTICS

Rated speed rpm 950 Uact V 3.000

Del. quantity cm3/1000 strokes : 224.0

Tolerance

cm3/1000 strokes : +-4.0

Check tolerance

cm3/1000s. : +-6.0

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

Edition : 29.02.96 : ISO 4113 Test oil

Combination No. : 0 402 736 901

Injection pump

Pump designation : PES6P120A720/3LS7251

: -1

EP type number : 0 412 726 926

Governor

Governer design. : RQV300...1000PA962

: -16K

Governer no. : 0 421 815 506

Cust. part No. : 51.11103-7505

Customer-spec. information

Customer : MAN : D2866 LF09 Motor

Power KW : 294.0

TEST BENCH REQUIREMENTS

Inlet line # 4.1

Test oil inlet

temp. °C Tolerance °C : +- 2.0

Qverflow valve : 1 417 413 047

Inlet press. bar : Tolerance bar : + 0.1

Overflow quantity

min. L/h : 165 Tolerance L/h : +- 20.0

Test nozzle holde

: 1 688 901 105 assembly

Opening pressure

: 208.5 bar

Tolerance bar : +- 1.5

Test lines : 1 680 750 089

Outside diameter : 8.0

x inside diameter: 3.0 x length mm : 600

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant.

per values _____

BEGINNING OF DELIVERY

Test pressure bar : Tolerance bar : +- 1.0

Prestroke mm : 4.85
Tolerance mm : + 0.05

Check

: + 0.10 tolerance mm

Rack travel in mm: 13.00 Tolerance mm : +- 0.50

Firing order : 6-2-4-1-5-

Phasing : 0-60-120-180-240 : -300

Tolerance : **←** 0.30

Check

tolerance °NW : +- 0.50

Start of delivery blocking

Tolerance : +- 0.50

Check

tolerance *NW : +- 0.75

Barrel no. : 6

BASIC SETTING

Rated speed rpm : 750

Rack travel in mm: 6.50

C11

Tolerance mm : +- 0.10	+
Del. quantity cm3/1000 strokes : 107.0	GUIDE SLEEVE TRAVEL
Tolerance	Rated speed rpm : 300 guide sleeve
cm3/1000 strokes : + 8.0	+ travel mm : 2.65 + Tolerance mm : + 0.20
Check tolerance cm3/1000s. : +- 14.0	+ Rated speed rpm : 1056 + guide sleeve
Spreed	travel mm : 8.01 Tolerance mm : + 0.15
Tolerance : 3.5	Rated speed rpm : 423 guide sleeve
Check tolerance cm3/1000s. : 6.0	travel mm : 4.01 Tolerance mm : + 0.25
Rated speed rpm : 900	Rated speed rpm : 1480 guide sleeve
Rack travel in mm : 13.40 Tolerance mm : + 0.05	travel mm : 13.50 Tolerance mm : + 0.50
Del. quantity cm3/1000 strokes : 279.0	GUIDE SLEEVE POSITION
Tolerance cm3/1000 strokes : +- 1.0	Rated speed rpm : 1310 Rack travel in mm : 12.10
Check tolerance	Tolerance mm : + 1.30
cm3/1000s. : +- 4.0	FULL LOAD DELIVERY AT FULL LOAD STOP
Tolerance cm3/1000 strokes : 10.0	Rated speed rpm : 900 Aneroid pressure hPa : 1200
Check tolerance cm3/1000s. : 14.0	Del. quantity cm3/1000 strokes : 279.0
Rated speed rpm : 300	Tolerance cm3/1000 strokes : + 1.0 Check tolerance
Rack travel in mm: 5.40 Tolerance mm: + 0.20	cm3/1000s. : + 4.0 Spreed Tolerance
Del. quantity cm3/1000 strokes : 32.0 Tolerance	cm3/1000 strokes : 10.0 Check tolerance
cm3/1000 strokes : + 3.0 Check tolerance	cm3/1000s. : 14.0
cm3/1000s. : +- 6.0 Spreed Tolerance	CONTROL LEVER
cm3/1000 strokes : 8.0 Check tolerance	- control lever
cm3/1000s. : 12.0	+ position degree : 285.0 + tolerance degree : + 4.0
(B) SETTING OF INJECTION PUMP WITH GOVERNOR	RATED SPEED

rack travel mm : 12.10 Rated speed rpm : 1045	# MEASUREMENT
Tolerance 1/min : +- 5	+ Pressure hPa : - Rated speed rpm : 900
rack travel mm : 4.00	rack travel mm : 9.20
Rated speed rpm : 1220	+ Tolerance mm : +- 0.10
Tolerance 1/min : + 15	+
rack travel mm : 0.50	Rated speed rpm : 900
Tolerance mm : +- 0.50	Pressure hPa : 220
Rated speed rpm : 1350	+ rack travel mm : 9.45
	+ Tolerance mm : +- 0.05
	+ Pressure hPa : 720
LOW IDLE	+ Pressure hPa : 720 + rack travel mm : 11.90 + Tolerance mm : + 0.20
LOW IDEL	Tolerance mm : + 0.20
	100010110011111
control lever	
position degree : 245.0	+ START CUT-OUT
tolerance degree : +- 4.0	T Dated aread arm . \ 100
Toobings	+ Rated speed rpm : > 100 + Rated speed rpm : < 240
Testing:	T Rated speed rpm : < 240
Rated speed rpm : 300	Check
rack travel mm : 5.40	+ speed 1/min :> 80
rack travel mm : 5.40 Tolerance mm : +- 0.10	+ Check
	+ speed 1/min : < 260
Rated speed rpm : 200	+ '
CRT mm min. ; > 7.50	FUEL DELIVERY CHARACTERISTICS
5111 IIII III III II II II II II II II II	+
Rated speed rpm : 330	+ Aneroid pressure
	+ hPa : 1200
	+ Rated speed rpm : 1000
TORQUE CONTROL	+ Del. quantity
Parks I suggest many 2000	- cm3/1000 strokes : 259.0
Rated speed rpm : 900	+ Tolerance
rack travel mm : 13.40 Tolerance mm : +- 0.05	+ cm3/1000 strokes : +- 3.0 + Check tolerance
Toterance mm : +- U.U5	+ cm3/1000s. : +- 6.0
Rated speed rpm : 1000	T (11137 10008. : +- 6.0
rack travel mm : 13.10	Aneroid pressure
Tolerance mm : +- 0.10	hPa : 1200
TO COT CITIES THE THE TENT	Rated speed rpm : 750
Rated speed rpm : 750	+ Del. quantity
rack travel mm : 12.80	+ cm3/1000 strokes : 271.0
Tolerance mm : + 0.10	+ Tolerance
	+ cm3/1000 strokes : +- 3.0
	+ Check tolerance
ANEROID/ALTITUDE	+ cm3/1000s. : +- 6.0
COMPENSATOR TEST	+
	+ Aneroid pressure
OFFT THO	+ hPa : -
SETTING	Rated speed rpm : 500
Dated around now a COO	+ Del. quantity
Rated speed rpm : 900 Pressure hPa : 1200	+ cm3/1000 strokes : 169.0 + Tolerance
nack though mm · 17/0	
rack travel mm : 13.40	+ cm3/1000 strokes : + 1.0
rack travel mm : 13.40 Tolerance mm : +- 0.05	+ Check tolerance + cm3/1000s. : + 4.0

BREAKAWAY

Rack travel in mm: 12.10
Rated speed rpm: 1045
Tolerance 1/min: +- 5

STARTING FUEL DELIVERY

Rated speed rpm : 100
Del. quantity
cm3/1000 strokes : 210.0
Tolerance
cm3/1000 strokes : +- 15.0

Check tolerance cm3/1000s. : + 19.0

LOW IDLE

Rated speed rpm 300 5.40 rack travel mm 0.20 Tolerance mm Del. quantity cm3/1000 strokes 32.0 Tolerance cm3/1000 strokes 3.0 Check tolerance cm3/1000s. 6.0 Spreed Tolerance 8.0 cm3/1000 strokes : Check tolerance cm3/1000s. 12.0

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

Edition : 29.02.96 Test oil : ISO 4113

Combination No. : 0 402 736 902

Injection pump

Pump designation : PES6P120A720/3LS7251

: -1

EP type number : 0 412 726 926

Governor

Governer design. : RQV300...1000PA962

: -17K

Governer no. : 0 421 815 507

Cust. part No. : 51.11103-7506

Customer—spec. information Customer : MAN

Motor : D2866 LF09

Power KW : 294.0

TEST BENCH REQUIREMENTS

Inlet line : 4.1

Test oil inlet

temp. $^{\circ}$ C : 4D Tolerance $^{\circ}$ C : \leftarrow 2.0

Overflow valve : 1 417 413 047

Inlet press. bar : 2.0
Tolerance bar : + 0.1

Overflow quantity

min. L/h : 165 Tolerance L/h : + 20.0

Test nozzle holde

assembly : 1 688 901 105

Opening pressure

bar : 208.5

Tolerance bar : +- 1.5

Test lines : 1 680 750 089

Outside diameter : 8.0

x inside diameter: 3.0 x length mm : 600

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant.

per values ____

BEGINNING OF DELIVERY

Test pressure bar : 26.0 Tolerance bar : + 1.0

Prestroke mm : 4.85
Tolerance mm : + 0.05

Check

tolerance mm : +- 0.10

Rack travel in mm : 13.00Tolerance mm : +0.50

Firing order : 6-2-4-1-5-

: 3

Phasing : 0-60-120-180-240

: -300

Tolerance : \leftarrow 0.30

Check

tolerance *NW : + 0.50

Start of delivery blocking

Tolerance : \leftarrow 0.50

Check

tolerance °NW : +- 0.75

Barrel no. : 6

BASIC SETTING

Rated speed rpm : 750

Rack travel in mm: 6.50

Tolerance mm	: + 0.10	+
Del. quantity cm3/1000 strokes	: 107.0	GUIDE
		Rated
Tolerance		+ guide
cm3/1000 strokes	: +- 8.0	+ travel
Check tolerance		† Tolera
cm3/1000s.	: +- 14.0	Rated
		+ guide
Spreed		+ travel
		+ Tolera
Tolerance		+
cm3/1000 strokes	: 3.5	+ Rated
		+ guide
Check tolerance		+ travel
cm3/1000s.	: 6.0	+ Tolera
		+
Rated speed rpm	: 900	+ Rated
		+ guide
		+ travel
Rack travel in mm		+ Tolera
Tolerance mm	: ← 0.05	+
		+ Rated
Del. quantity		+ guide
cm3/1000 strokes	: 279.0	+ travel
		+ Tolera
Tolerance		+
cm3/1000 strokes	: + 1.0	+
		+ GUIDE
Check tolerance		+
cm3/1000S.	: +- 4.0	+ Rated
		+
Spreed		+ Rack t
Tolerance		+ Tolera
cm3/1000 strokes	: 10.0	+
		+
Check tolerance		+ FULL L
cm3/1000s.	: 14.0	+
		+ Rated
Rated speed rpm	: 300	+ Aneroi
		+ hPa
Rack travel in mm		+ Del. q
Tolerance mm	: +- 0.20	+ cm3/10
Del. quantity		+ Tolera
cm3/1000 strokes	: 32.0	+ cm3/10
Tolerance		+ Check
cm3/1000 strokes	: ← 3.0	+ cm3/10
Check tolerance		+ Spreed
cm3/1000s.	: +- 6.0	+ Tolera
Spreed		+ cm3/10
Tolerance	0.5	+ Check
cm3/1000 strokes	: 8.0	+ cm3/10
Check tolerance	40.5	+
cm3/1000s.	: 12.0	+
		+
4-1		+ CONTROL
(B) SETTING OF INJ	ECTION PUMP	†
WITH GOVERNOR		+

GUIDE SLEEVE TRAV	EL	
Rated speed rpm guide sleeve	: 300	
travel mm Tolerance mm	: 1.80 : +- 0.20	
Rated speed rpm guide sleeve	: 1059	
travel mm Tolerance mm	: 8.73 : + 0.15	
Rated speed rpm guide sleeve	: 772	
travel mm Tolerance mm	: 6.83 : + 0.25	
Rated speed rpm guide sleeve	: 480	
travel mm Tolerance mm	: 3.79 : + 0.25	
Rated speed rpm guide sleeve	: 1510	
travel mm Tolerance mm	: 13.50 : + 0.50	
GUIDE SLEEVE POSI	TION	
Rated speed rpm	: 1290	
Rack travel in mm Tolerance mm	: 12.10 : + 1.30	
FULL LOAD DELIVERY AT FULL LOAD STOP		
Rated speed rpm Aneroid pressure	: 900	
hPa Del. quantity	: 1200	
cm3/1000 strokes	: 279.0	
Tolerance cm3/1000 strokes	: + 1.0	
Check tolerance cm3/1000s. Spreed	: +- 4.0	
Tolerance cm3/1000 strokes	: 10.0	
Check tolerance cm3/1000s.	: 14.0	

control lever		†	SETTING	
position degree tolerance degree		+	Rated speed rpm Pressure hPa rack travel mm	: 1200
RATED SPEED		Ŧ	Tolerance mm	: +- 0.05
rack travel mm Rated speed rpm Tolerance 1/min	: 1045	+	MEASUREMENT Pressure hPa	: -
rack travel mm Rated speed rpm Tolerance 1/min	: 1215	‡	Rated speed rpm rack travel mm Tolerance mm	: 9.20
rack travel mm		1	Rated speed rpm	: 900
Tolerance mm Rated speed rpm	: ← 0.50	+	Pressure hPa rack travel mm Tolerance mm	
LOW IDLE			Pressure hPa rack travel mm Tolerance mm	: 11.90
control lever position degree tolerance degree		+	START CUT-OUT	: > 100
Testing:		Ŧ	Rated speed rpm Rated speed rpm	: < 240
Rated speed rpm rack travel mm Tolerance mm	: 5.40	+	Check speed 1/min Check speed 1/min	
Rated speed rpm	; 200	1		
CRT mm min.	: > 7.20	1	FUEL DELIVERY CHA	ARACTERISTICS
Rated speed rpm	: 330		Aneroid pressure hPa Rated speed rpm	: 1200 : 1000
TORQUE CONTROL		‡	Del. quantity cm3/1000 strokes	: 259.0
Rated speed rpm rack travel mm Tolerance mm	: 900 : 13.40 : ← 0.05	‡	Tolerance cm3/1000 strokes Check tolerance	
Rated speed rpm rack travel mm Tolerance mm	: 1000 : 13.10 : + 0.10	† †	cm3/1000s. Aneroid pressure hPa	: +- 6.0
Rated speed rpm rack travel mm Tolerance mm		‡	Rated speed rpm Del. quantity cm3/1000 strokes Tolerance	: 271.0
		‡	cm3/1000 strokes Check tolerance	
ANEROID/ALTITUDE COMPENSATOR TEST		‡	cm3/1000s.	: +- 6.0
		Ţ	Aneroid pressure hPa	: -

Rated speed rpm 500 Del. quantity cm3/1000 strokes : 169.0 Tolerance cm3/1000 strokes : +-1.0 Check tolerance cm3/1000s. 4.0 BREAKAWAY Rack travel in mm: 12.10 Rated speed rpm 1045 Tolerance 1/min STARTING FUEL DELIVERY Rated speed rpm 100 Del. quantity cm3/1000 strokes : 210.0 Tolerance cm3/1000 strokes : + 15.0Check tolerance cm3/1000s. : +- 19.0 LOW IDLE Rated speed rpm 300 rack travel mm 5.40 Tolerance mm 0.20 Del. quantity cm3/1000 strokes : 32.0 Tolerance cm3/1000 strokes 3.0 Check tolerance cm3/1000s. 6.0 Spreed Tolerance 8.0 cm3/1000 strokes : Check tolerance cm3/1000s. 12.0 End of test specification sheet

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

Edition : 26.07.95 Test oil : ISO 4113

Combination No. : 0 402 746 601

Injection pump

Pump designation : PES6P120A720RS7389 EP type number : 0 412 726 944

Governor

Governer design. : RQ275/1050PA1021-4

Governer no. : 0 421 801 795

Cust. part No. :

Customer-spec. information

Customer : IVECO-FRANCE Motor : 8460.41E.711

TEST BENCH REQUIREMENTS

Inlet line : 4.2

Test oil inlet

temp. °C : 40
Tolerance °C : +- 2.0

Overflow valve : 2 417 413 076

Inlet press. bar : 2.5 Tolerance bar : +- 0.1

Overflow quantity

min. L/h : 145 Tolerance L/h : + 10.0

Test nozzle holde

assembly : 1 688 901 105

Opening pressure

bar : 208.5 Tolerance bar : + 1.5 Test Lines : 1 680 750 089

Outside diameter : 8.0

x inside diameter: 3.0 x length mm : 600

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant.

per values _____

BEGINNING OF DELIVERY

Test pressure bar : 26.0 Tolerance bar : + 1.0

Prestroke mm : 5.15
Tolerance mm : +- 0.05

Check

tolerance mm : \leftarrow 0.10

Rack travel in mm : 10.50 Tolerance mm : + 1.50

Firing order : 1-5-3-6-2-

: 4

Phasing : 0-60-120-180-240

: -300

Tolerance : + 0.30

Check

tolerance "NW : + 0.75

Start of delivery mark

Check

tolerance "NW : + 0.40

Barrel no. : 1

BASIC SETTING

Rated speed rpm : 1050

Rack travel in mm : 10.95 Tolerance mm : + 0.05

Del. quantity +	Check tolerance
cm3/1000 strukes : 171.0	cm3/1000s. : 9.0
Tolerance cm3/1000 strokes : + 1.0	RATED SPEED
Check tolerance cm3/1000s. ; + 4.0	rack travel mm : 9.90 Rated speed rpm : 1103 Tolerance 1/min : + 8
Spreed Tolerance cm3/1000 strokes : 5.0	rack travel mm : 4.00 Rated speed rpm : 1165 Tolerance 1/min : + 15
Check tolerance cm3/1000s. 9.0	rack travel mm : 0.50 Tolerance mm : + 0.50
Rated speed rpm : 275	Rated speed rpm : 1350
Rack travel in mm: 4.60 Tolerance mm: + 0.20 Del. quantity	LOW IDLE
cm3/1000 strokes : 23.0	FOR INCL
cm3/1000 strokes : + 3.0 + Check tolerance +	control lever position degree : 73.0
cm3/1000s. : +- 6.0 +	tolerance degree : +- 4.0
Tolerance + cm3/1000 strokes : 8.0 +	Testing:
Check tolerance cm3/1000s. : 12.0	Rated speed rpm : 275 rack travel mm : 4.60 Tolerance mm : + 0.10
(B) SETTING OF INJECTION PUMP WITH GOVERNOR	rack travel mm : 2.00 Rated speed rpm : 356 Tolerance 1/min : +- 20
CUTDE SI SELIE DOSTITON	Rated speed rpm : 175
GUIDE SLEEVE POSITION Rated speed rpm : 600	CRT mm min. : > 6.10
Rack travel in mm: 20.00	TORQUE CONTROL
Tolerance mm : + 0.80	Rated speed rpm : 1050 rack travel mm : 10.95
FULL LOAD DELIVERY AT FULL LOAD STOP	Tolerance mm : + 0.05
Rated speed rpm : 1050 Aneroid pressure	Rated speed rpm : 550 rack travel mm : 11.00
hPa : 900 + Del. quantity +	Tolerance mm : + 0.10
cm3/1000 strokes : 171.0 + Tolerance cm3/1000 strokes : + 1.0 +	ANEROID/ALTITUDE COMPENSATOR TEST
Check tolerance cm3/1000s. : + 4.0	
Spreed Tolerance	SETTING
cm3/1000 strokes : 5.0 +	Rated speed rpm : 500

MEASUREMENT Pressure hPa Rated speed rpm	
Rated speed rpm	
rack travel mm Tolerance mm	: - : 500 : 8.70 : + 0.10
Rated speed rpm	: 500
Pressure hPa rack travel mm Tolerance mm	: 220 : 9.30 : +- 0.20
Pressure hPa rack travel mm Tolerance mm	: 340 : 10.35 : + 0.05
START CUT-OUT	
Rated speed rpm Rated speed rpm	: > 100 : < 195
Check speed 1/min Check	: > 80
speed 1/min	: < 215
FUEL DELIVERY CHAP	RACTERISTICS
Aneroid pressure hPa Rated speed rpm	: 900 : 550
Del. quantity cm3/1000 strokes	: 182.0
Tolerance cm3/1000 strokes Check tolerance	: +- 3.0
cm3/1000s.	: +- 6.0
Aneroid pressure hPa	: -
Rated speed rpm Del. quantity	: 500
cm3/1000 strokes Tolerance	: 107.0
cm3/1000 strokes Check tolerance cm3/1000s.	: +- 1.0 : +- 4.0
BREAKAWAY	

Rated speed rpm : 1103 Tolerance 1/min : +-STARTING FUEL DELIVERY Rated speed rpm : 100 Del. quantity cm3/1000 strokes : 170.0 Tolerance cm3/1000 strokes : +- 15.0 Check tolerance cm3/1000s. : +- 19.0 LOW IDLE Rated speed rpm 275 rack travel mm 4.60 Tolerance mm 0.20 Del. quantity cm3/1000 strokes : 23.0 Tolerance cm3/1000 strokes : + 3.0 Check tolerance cm3/1000s. 6.0 Spreed Tolerance

8.0

12.0

End of test specification sheet

cm3/1000 strokes :

Check tolerance cm3/1000s.

Rack travel in mm:

9.90

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

Edition : 05.03.96 Test oil : ISO 4113

Combination No. : 0 402 746 606

Injection pump

Pump designation : PES6P110A720RS7406 EP type number : 0 412 716 810

Governor

Governer design. : RQV300...1050PA1090

: -1K

Governer no. : 0 421 815 497

Cust. part No. : 9279607

Customer-spec. information
Customer : LIEBHERR
Motor : D 926 TI-E
Power KW : 230.0

TEST BENCH REQUIREMENTS

Inlet line : 4.1

Test oil inlet

temp. °C : 40 Tolerance °C : +- 2.0

Overflow valve : 1 417 413 025

Inlet press. bar : 1.5 Tolerance bar : + 0.1

Overflow quantity

min. L/h : 125 Tolerance L/h : + 20.0

Test nozzle holde

assembly : 1 688 901 101

Opening pressure

bar : 208.5 Tolerance bar : + 1.5 Test lines : 1 680 750 008

Outside diameter : 6.0

x inside diameter: 2.0 x length mm : 600

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant.

per values _____

BEGINNING OF DELIVERY

Test pressure bar : 26.0 Tolerance bar : + 1.0

Prestroke mm : 3.65
Tolerance mm : + 0.05
Check

tolerance mm : +- 0.10

Dools through in many 10 FB

Rack travel in mm : 10.50 Tolerance mm : + 1.50

Firing order : 1-5-3-6-2-

4

Phasing : 0-60-120-180-240

: -300 erance : +- 0.30

Tolerance Check

tolerance "NW : +- 0.50

BASIC SETTING

Rated speed rpm : 1050

Rack travel in mm : 13.80
Tolerance mm : + 0.05

Toterance man

Del. quantity cm3/1000 strokes : 205.0

Tolerance

cm3/1000 strokes : +- 1.0

Check tolerance cm3/1000s. : + 4.0	Rated speed rpm : 1180
Spreed Tolerance cm3/1000 strokes : 5.0	Rack travel in mm : 12.80 Tolerance mm : +- 2.00
Check tolerance - 9.0	FULL LOAD DELIVERY AT FULL LOAD STOP
Rated speed rpm : 350	Rated speed rpm : 1050 Aneroid pressure
Rack travel in mm : 5.40	hPa : 1600
Tolerance mm : ← 0.20	Del. quantity cm3/1000 strokes : 205.0 Tolerance
Del. quantity cm3/1000 strokes : 25.0	cm3/1000 strokes : +- 1.0
Tolerance - cm3/1000 strokes : +- 3.0 -	- Check tolerance - cm3/1000s. : +- 4.0
Check tolerance cm3/1000s. : +- 6.0	Spreed Tolerance
Spreed - Tolerance -	cm3/1000 strokes : 5.0 Check tolerance
cm3/1000 strokes : 6.0 - Check tolerance	- cm3/1000s. : 9.0
cm3/1000s. : 10.0	
(B) SETTING OF INJECTION PUMP WITH GOVERNOR	control Lever position degree : 119.0
GUIDE SLEEVE TRAVEL	tolerance degree : +- 4.0 RATED SPEED
Rated speed rpm : 350 guide sleeve	- rack travel mm : 12.80
travel mm : 1.86	- Rated speed rpm : 1090
Tolerance mm : +- 0.20	- Tolerance 1/min : +- 5 -
Rated speed rpm : 1117	- rack travel mm : 4.00
guide sleeve + travel mm : 10.27 +	- Rated speed rpm : 1195 - Tolerance 1/min : + 15
Tolerance mm : + 0.15	•
Rated speed rpm : 756	- rack travel mm : 0.50 - Tolerance mm : +- 0.50 - Rated speed rpm : 1300
guide sleeve	- Rated speed rpm : 1300
travel mm · 677	
travel mm : 6.17 Tolerance mm : +- 0.25	
Tolerance mm : +- 0.25 Rated speed rpm : 480 guide sleeve	LOW IDLE
Tolerance mm : +- 0.25 Rated speed rpm : 480 guide sleeve travel mm : 3.75	•
Tolerance mm : +- 0.25 Rated speed rpm : 480 guide sleeve travel mm : 3.75 Tolerance mm : +- 0.25	- - control lever - position degree : 74.0
Tolerance mm : +- 0.25 Rated speed rpm : 480 guide sleeve travel mm : 3.75 Tolerance mm : +- 0.25 Rated speed rpm : 1330	control lever position degree : 74.0 tolerance degree : +- 4.0
Tolerance mm : +- 0.25 Rated speed rpm : 480 guide sleeve travel mm : 3.75 Tolerance mm : +- 0.25 Rated speed rpm : 1330	- - control lever - position degree : 74.0
Tolerance mm : +- 0.25 Rated speed rpm : 480 guide sleeve travel mm : 3.75 Tolerance mm : +- 0.25 Rated speed rpm : 1330 guide sleeve	control lever position degree : 74.0 tolerance degree : +- 4.0

Rated speed rpm	: 250
CRT mm min.	: > 7.40
Rated speed rpm	: 420
TORQUE CONTROL	
Rated speed rpm rack travel mm Tolerance mm	: 1050 : 13.80 : + 0.05
Rated speed rpm rack travel mm Tolerance mm	
Rated speed rpm rack travel mm Tolerance mm	: 900 : 13.35 : + 0.15
Rated speed rpm rack travel mm Tolerance mm	
Rated speed rpm rack travel mm Tolerance mm	: 600 : 11.80 : ← 0.15
Rated speed rpm rack travel mm Tolerance mm	: 500 : 10.95 : +- 0.10
ANEROID/ALTITUDE COMPENSATOR TEST	
SETTING	
Rated speed rpm Pressure hPa rack travel mm Tolerance mm	: 1050 : 1600 : 13.80 : +- 0.05
MEASUREMENT	
Pressure hPa Rated speed rpm rack travel mm Tolerance mm	: 1050 : 10.55 : + 0.15
Rated speed rpm	: 1050
Pressure hPa rack travel mm Tolerance mm	: 1020 : 13.00 : +- 0.05
Pressure hPa	: 740

rack travel mm Tolerance mm	: 11.45 : ← 0.10
FUEL DELIVERY CHA	RACTERISTICS
Aneroid pressure hPa Rated speed rpm Del. quantity cm3/1000 strokes Tolerance cm3/1000 strokes Check tolerance cm3/1000s.	: 1600 : 800 : 207.0 : + 3.0 : + 6.0
Aneroid pressure hPa Rated speed rpm Del. quantity cm3/1000 strokes Tolerance cm3/1000s strokes Check tolerance cm3/1000s. Aneroid pressure hPa Rated speed rpm Del. quantity cm3/1000 strokes Tolerance cm3/1000 strokes Check tolerance cm3/1000s.	: 1600 : 500 : 194.0 : + 3.0 : + 6.0 : 500 : 184.0 : + 1.0 : + 4.0
BREAKAWAY	
Rack travel in mm Rated speed rpm Tolerance 1/min	: 1090
STARTING FUEL DELI	CVERY
Rated speed rpm rack travel mm Tolerance mm Del. quantity cm3/1000 strokes Tolerance cm3/1000 strokes Check tolerance cm3/1000s.	: 100 : 10.55 : ← 0.20 : 175.0 : ← 10.0 : ← 14.0

LOW IDLE

Rated speed rpm rack travel mm Tolerance mm Del. quantity	: 350 : 5.40 : + 0.20
cm3/1000 strokes	: 25.0
Tolerance	
cm3/1000 strokes	: +- 3.0
Check tolerance cm3/1000S. Spreed	: +- 6.0
Tolerance	
cm3/1000 strokes Check tolerance	: 6.0
cm3/1000s.	: 10.0

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

Edition : 05.03.96 Test oil : ISO 4113

Combination No. : 0 402 746 606A

Injection pump

Pump designation : PES6P110A720RS7406 EP type number : 0 412 716 810

Governor

Governer design. : RQV300...1050PA1090

: -1K

Governer no. : 0 421 815 497

Cust. part No. : 9279607

Customer—spec. information
Customer : LIEBHERR
Motor : D 926 TI-E
Power KW : 230.0

TEST BENCH REQUIREMENTS

Inlet line : 4.1

Test oil inlet

temp. °C : 40
Tolerance °C : +- 2.0

Overflow valve : 1 417 413 025

Inlet press. bar : 1.5 Tolerance bar : +- 0.1

Overflow quantity

min. l/h : 125 Tolerance l/h : + 10.0

Test nozzle holde

assembly : 1 688 901 101

Opening pressure

bar : 208.5 Tolerance bar : +- 1.5 Test lines : 1 680 750 008

Outside diameter : 6.0

x inside diameter: 2.0 x length mm: 600

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant.

per values ____

BEGINNING OF DELIVERY

Test pressure bar : 26.0 Tolerance bar : +- 1.0

Prestroke mm : 3.65
Tolerance mm : + 0.05
Check

Lneck

tolerance mm : + 0.10

Rack travel in mm : 10.50 Tolerance mm : + 1.50

Firing order : 1-5-3-6-2-

: 4

Phasing : 0-60-120-180-240

: -300 Tolerance : + 0.30

Check

tolerance *NW : + 0.50

BASIC SETTING

Rated speed rpm : 1050

Rack travel in mm : 13.80 Tolerance mm : + 0.05

Del. quantity

cm3/1000 strokes : 205.0

Tolerance

cm3/1000 strokes : +- 1.0

Check tolerance cm3/1000s. : +- 4.0	Rated speed rpm : 1180
Spreed Tolerance cm3/1000 strokes : 5.0	Rack travel in mm : 12.80 Tolerance mm : +- 2.00
Check tolerance cm3/1000s. 9.0	FULL LOAD DELIVERY AT FULL LOAD STOP
Rated speed rpm : 350	Rated speed rpm : 1050 Aneroid pressure
Rack travel in mm : 5.40	hPa : 1600 Del. quantity
Tolerance mm : +- 0.20 Del. quantity	cm3/1000 strokes : 205.0 Tolerance
cm3/1000 strokes : 25.0 Tolerance	cm3/1000 strokes : +- 1.0 Check tolerance
cm3/1000 strokes : +- 3.0	+ cm3/1000s. : $+$ 4.0
Check tolerance cm3/1000s. : +- 6.0	+ Spreed + Tolerance
Spreed Tolerance	+ cm3/1000 strokes : 5.0 + Check tolerance
cm3/1000 strokes : 6.0 Check tolerance	cm3/1000s. : 9.0
cm3/1000s. : 10.0	<u> </u>
(B) SETTING OF INJECTION PUMP WITH GOVERNOR	control Lever position degree : 119.0 tolerance degree : + 4.0
GUIDE SLEEVE TRAVEL	RATED SPEED
Rated speed rpm : 350 guide sleeve	rack travel mm : 12.80
travel mm : 1.86 Tolerance mm : +- 0.20	Rated speed rpm : 1090 Tolerance 1/min : +- 5
Rated speed rpm : 1102	+ rack travel mm : 4.00
guide sleeve travel mm : 10.05	Rated speed rpm : 1195 Tolerance 1/min : +- 15
Tolerance mm : + 0.15	+
Rated speed rpm : 749 guide sleeve	rack travel mm : 0.50 Tolerance mm : + 0.50 Rated speed rpm : 1300
travel mm : 6.11 Tolerance mm : + 0.25	1
Rated speed rpm : 480 guide sleeve	+ LOW IDLE
travel mm : 3.75 Tolerance mm : + 0.25	+ control lever
Rated speed rpm : 1330	position degree : 74.0 tolerance degree : + 4.0
guide sleeve travel mm : 13.50	† Testing:
Tolerance mm : + 0.50	Rated speed rpm : 350
GUIDE SLEEVE POSITION	rack travel mm : 5.40 Tolerance mm : +- 0.10

Rated speed rpm	: 250	‡	rack travel mm Tolerance mm	: 11.45 : +- 0.10
CRT mm min.	: > 7.40	+		
Rated speed rpm	: 420	‡	FUEL DELIVERY CHA	RACTERISTICS
TORQUE CONTROL		<u> </u>	Aneroid pressure	: 1600
Rated speed rpm rack travel mm	: 1050 : 13.80	+	Rated speed rpm Del. quantity	: 800
Tolerance mm	: +- 0.05 : 950	Ŧ	cm3/1000 strokes Tolerance cm3/1000 strokes	
Rated speed rpm rack travel mm Tolerance mm		Ţ	Check tolerance cm3/1000s.	: +- 6.0
Rated speed rpm rack travel mm Tolerance mm	: 900 : 13.35 : + 0.15	‡	Aneroid pressure hPa Rated speed rpm	: 1600 : 500
Rated speed rpm rack travel mm Tolerance mm		1	Del. quantity cm3/1000 strokes Tolerance cm3/1000 strokes	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Rated speed rpm rack travel mm		+	Check tolerance cm3/1000s.	: +- 6.0
Tolerance mm	: +- 0.15	+	Aneroid pressure hPa Rated speed rpm	: - : 500
Rated speed rpm rack travel mm Tolerance mm	: 10.95	Ţ <u>†</u>	Del. quantity cm3/1000 strokes Tolerance	
ANEROID/ALTITUDE COMPENSATOR TEST		+	cm3/1000 strokes Check tolerance cm3/1000s.	: + 1.0 : + 4.0
SETTING		+	Spreed Tolerance cm3/1000 strokes	: 8.0
Rated speed rpm Pressure hPa rack travel mm	: 1050 : 1600 : 13.80	+ + +	Check tolerance cm3/1000s.	: 12.0
Tolerance mm MEASUREMENT	: +- 0.05	‡	BREAKAWAY	
Pressure hPa Rated speed rpm rack travel mm Tolerance mm	: - : 1050 : 10.55 : +- 0.15	+	Rack travel in mm Rated speed rpm Tolerance 1/min	: 1090
Rated speed rpm	: 1050	‡	STARTING FUEL DEL	IVERY
Pressure hPa rack travel mm Tolerance mm	: 1020 : 13.00 : + 0.05	+++++++++++++++++++++++++++++++++++++++	Rated speed rpm rack travel mm Tolerance mm Del. quantity	: 100 : 10.55 : + 0.20
Pressure hPa	: 740	Į	cm3/1000 strokes	: 175.0

Tolerance		
cm3/1000 strokes	; +-	10.0
Check tolerance		
cm3/1000s.	: +-	14.0

LOW IDLE

Rated speed rpm rack travel mm Tolerance mm Del. quantity cm3/1000 strokes Tolerance cm3/1000 strokes Check tolerance cm3/1000s. Spreed	: +-	350 5.40 0.20 25.0 3.0 6.0	
cm3/1000 strokes	:	6.0	
Check tolerance cm3/1000s.	:	10.0	

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

: 10.11.94 Edition Test oil : ISO 4113

Combination No. : 0 402 746 997

Injection pump

Pump designation : PES6P120A720RS7224

: -2

EP type number : 0 412 726 893

Governor

Governer design. : RQV275...1100PA975

: -3K

Governer no. : 0 421 815 350

Cust. part No.

Customer-spec. information

Customer : IVECO-AIFO

: 8361 SRM 40.10 Matar

TEST BENCH REQUIREMENTS

Inlet line : 4.2

Test oil inlet

temp. °C Tolerance °C

Overflow valve : 2 417 413 076

Inlet press. bar : 2.5
Tolerance bar : + 0.1

Overflow quantity

min. L/h : 140 Tolerance L/h : + 20.0

Test nozzle holde

: 1 688 901 105 assembly

Opening pressure

208.5 bar Tolerance bar : +- 1.5 Test Lines : 1 680 750 089

Outside diameter : 8.0

x inside diameter: x length mm :

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant.

per values _____

BEGINNING OF DELIVERY

Test pressure bar : Tolerance bar : + 1.0

Prestroke mm 5.15 Tolerance mm : +- 0.05

Check

tolerance mm : + 0.10

Rack travel in mm: 10.50 : +- 1.50 Tolerance mm

: 1-5-3-6-2-Firing order

Phasing : 0-60-120-180-240

: -300

: +- 0.30 Tolerance

Check

: +- 0.50 tolerance "NW

Start of delivery mark

Check

tolerance °NW : +- 0.40

Barrel no. : 1

BASIC SETTING

Rated speed rpm : 1100

Rack travel in mm: 12.75

Tolerance mm : + 0.05

Del. quantity - cm3/1000 strokes : 218.0 -	guide steeve travel mm : 13.50 Tolerance mm : + 0.50
Tolerance - cm3/1000 strokes : + 1.0 -	
Check tolerance	GUIDE SLEEVE POSITION Rated speed rpm : 1210
Spreed	Rack travel in mm: 10.70
Tolerance cm3/1000 strokes : 5.0	Tolerance mm : +- 1.30
Check tolerance cm3/1000s. 9.0	FULL LOAD DELIVERY AT FULL LOAD STOP
Rated speed rpm : 275	Rated speed rpm : 1100 Aneroid pressure
Rack travel in mm: 5.50	hPa : 1200 Del. quantity
Tolerance mm : +- 0.20 Del. quantity	cm3/1000 strokes : 218.0 Tolerance
cm3/1000 strokes : 26.0	cm3/1000 strokes : +- 1.0
Tolerance cm3/1000 strokes : +- 3.0 -	Check tolerance cm3/1000s. : +- 4.0
Check tolerance - 6.0 -	Spreed Tolerance
Spreed	cm3/1000 strokes : 5.0
Tolerance - cm3/1000 strokes : 8.0 -	Check tolerance cm3/1000s. : 9.0
Check tolerance - cm3/1000s. : 12.0 -	
	CONTROL 4 FUED
(B) SETTING OF INJECTION PUMP	CONTROL LEVER
WITH GOVERNOR -	control lever
	position degree : 120.0 tolerance degree : + 4.0
GUIDE SLEEVE TRAVEL	
Rated speed rpm : 275	- RATED SPEED
guide steeve	rack travel mm : 11.70
travel mm : 2.00	Rated speed rpm : 1145
Tolerance mm : +- 0.20	Tolerance 1/min : +- 5
Rated speed rpm : 1150	rack travel mm : 4.00
guide sleeve	- Rated speed rpm : 1235
travel mm : 10.45 Tolerance mm : + 0.15	- Tolerance 1/min : + 15
Octob annual mm 3 741	rack travel mm : 0.50
Rated speed rpm : 764 guide sleeve	- Tolerance mm : +- 0.50 - Rated speed rpm : 1350
travel mm : 6.24 + Tolerance mm : + 0.25 +	- -
TOCCI CITICE (INI)	
Rated speed rpm : 430 guide sleeve	- LOW IDLE
travel mm : 3.63	-
Tolerance mm : + 0.25	- control lever
Rated speed rpm : 1350	- position degree : 73.0 - tolerance degree : +- 4.0
207	

Testing: Rated speed rpm : 275 rack travel mm : 5.50 Tolerance mm : + 0.10	Pressure hPa : 750 rack travel mm : 11.35 Tolerance mm : + 0.05
Rated speed rpm : 100	START CUT-OUT
CRT mm min. : > 6.70	Rated speed rpm : > 170 Rated speed rpm : < 220
Rated speed rpm : 335	Check speed 1/min : > 150 Check
TORQUE CONTROL	speed 1/min : < 240
Rated speed rpm : 1100 rack travel mm : 12.75 Tolerance mm : + 0.05	FUEL DELIVERY CHARACTERISTICS Aneroid pressure
Rated speed rpm : 900 rack travel mm : 12.75 Tolerance mm : + 0.10	+ hPa : 1200 + Rated speed rpm : 900 + Del. quantity
Rated speed rpm : 500 rack travel mm : 11.80 Tolerance mm : + 0.10	- cm3/1000 strokes : 228.0 - Tolerance - cm3/1000 strokes : + 3.0 - Check tolerance
Rated speed rpm : 700 rack travel mm : 12.50 Tolerance mm : + 0.10	- cm3/1000S. : +- 6.0 - Aneroid pressure - hPa : 1200
Rated speed rpm : 350 rack travel mm : 11.40 Tolerance mm : + 0.20	Rated speed rpm : 500 Del. quantity cm3/1000 strokes : 243.0 Tolerance cm3/1000 strokes : + 3.0
ANEROID/ALTITUDE COMPENSATOR TEST	Check tolerance cm3/1000s. :+ 6.0
SETTING	Aneroid pressure hPa : - Rated speed rpm : 500
Rated speed rpm : 900 Pressure hPa : 1200 rack travel mm : 12.75 Tolerance mm : + 0.05	Del. quantity
MEASUREMENT	DDEAKALIAY
Pressure hPa : - Rated speed rpm : 900 rack travel mm : 7.70 Tolerance mm : + 0.20 Rated speed rpm : 900	Rack travel in mm: 11.70 Rated speed rpm: 1145 Tolerance 1/min: +- 5
Pressure hPa : 410 rack travel mm : 8.80	
Tolerance mm : +- 0.20	+ STARTING FUEL DELIVERY

Rated speed rpm : 100 Del. quantity cm3/1000 strokes : 140.0

Tolerance

cm3/1000 strokes : + 15.0

Check tolerance

cm3/1000s. : +- 19.0

LOW IDLE

Rated speed rpm 275 5,50 rack travel mm : + 0.20 Tolerance mm Del. quantity cm3/1000 strokes : 26.0 Tolerance cm3/1000 strokes : +-3.0 Check tolerance cm3/1000s. 6.0 Spreed Tolerance cm3/1000 strokes : 8.0 Check tolerance cm3/1000s. 12.0

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

: 05.03.96 Edition Test oil : ISO 4113

Combination No. : 0 402 796 820

Injection pump

Pump designation : PES6P120A720LS7410 EP type number : 0 412 726 957

Governor

Governer design. : RE30

Governer no. : 0 421 890 038

Cust. part No. : 0260744902

Customer-spec. information : MTU Customer : 6-R-183 Motor Power KW : 441.0

TEST BENCH REQUIREMENTS

Inlet line : 4.1

Test oil inlet

temp. °C 40 : +-Tolerance °C 2.0

Overflow valve : 1 417 413 047

Inlet press. bar : Tolerance bar : +- 0.1

Overflow quantity

: 110 min. L/h Tolerance l/h: + 10.0

Test nozzle holde

: 1 688 901 105 assembly

Opening pressure

208.5 bar : +- 1.5 Tolerance bar

Test Lines : 1 680 750 075

Outside diameter : 8.0

x inside diameter:

x length mm : 1000

REMARKS

Pump-specific values in Section (B) must be observed!

(A) INJECTION PUMP SETTINGS No basic setting. Setting of constant delivery under Section C.

BEGINNING OF DELIVERY

Test pressure bar : Tolerance bar : + 1.0

: 4.05 Prestroke mm

4.05 Prestroke mm : : ← 0.05 Tolerance mm Tolerance mm : ← 0.05 Check

: +- 0.10 tolerance mm

Check

tolerance mm : + 0.10

Rack travel in mm: 20.00

Rack travel in mm: 20.50 Tolerance mm : +- 1.00 : +- 0.50 Tolerance mm

: 6-2-4-1-5-Firing order

: 0-60-120-180-240 Phasing

: -300 : +- 0.30

Tolerance

Check

: **←** 0.50 tolerance "NW

Start of delivery mark

Barrel no. :

(B) POSITIONER TESTING Warm-up time: 3 minutes at n=600 min-1, Uact = 2.5 V

TESTING & SETTING RACK TRAVEL SENSOR POSITION

Engine speed min-1: 0

Setting point (P, R and H pump)

Uact V 3.100 CRT mm 13.00 Tolerance mm : +/- 0.05

Check

: +/- 0.10 tolerance mm

Check value (P, R and H pump)

1.700 Uact V : CRT mm 6.15 Tolerance mm : +/- 0.25

Check

: +/- 0.30 tolerance mm

Setting point (m pump)

3.100 Uact V CRT mm 12.50 : +/- 0.05 Tolerance mm Check

: +/- 0.10 tolerance mm

Check value (amua M)

1.700 Uact V 5.50 CRT mm : +/- 0.25 Tolerance mm

Check

: +/- 0.30 tolerance mm

Stop position

: Value with Uact V

> deenergised adjusting magnet and control rod in

stop position.

0.75 CRT mm : +/- 0.25 Tolerance mm

Check

tolerance mm : +/- 0.35

ENGINE-SPEED SENSOR (All P and R pumps not H and M pumps)

Test with control rod in stop position

Engine speed min-1: 60 Amplitude V 1.4 Tolerance V : +/- 0.6 Check

tolerance V : +/- 1.20

Engine speed min-1: 600

Difference Amplitude to

Amplitude V : max.1.4

(C) INJECTION PUMP WITH POSITIONER

TEST POINT V1

1150 Rated speed rpm : Uact V 3,500

Del. quantity

cm3/1000 strokes : 362.0

Tolerance

cm3/1000 strokes : +-1.0

Check tolerance

cm3/1000s. 4.0

Spreed Tolerance

cm3/1000 strokes : 6.0

Check tolerance

cm3/1000s. 10.0

FUEL DELIVERY CHARACTERISTICS

Rated speed rpm 750 Uact V 3.500

Del. quantity cm3/1000 strokes : 428.0

Tolerance

cm3/1000 strokes 4.0 : +-

Check tolerance

cm3/1000s.

End of test specification sheet

007

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

Edition : 20.02.95 Test oil : ISO 4113

Combination No. : 0 402 846 301

Injection pump

Pump designation : PE6P12OA32ORS8508 EP type number : 0 412 826 201

Governor

Governer design. : RQV275...1000PA1099K

Governer no. : 0 421 815 983

Cust. part No. : 1287579/4

Customer-spec. information Customer : DAF : WS 315 M Motor Power KW : 315.0

TEST BENCH REQUIREMENTS

Inlet line : 3.2

Test oil inlet

40 temp. °C Tolerance °C : +- 2.0

Overflow valve : 1 417 413 025

Inlet press. bar : 2.5 Tolerance bar : + 0.1

Overflow quantity

min. L/h : 180 Tolerance L/h : + 10.0

Test nozzle holde

: 1 688 901 105 assembly

Opening pressure

: 208.5 bar Tolerance bar : +- 1.5 Test lines : 1 680 750 089

Outside diameter : 8.0

x inside diameter: x Length mm : 600

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant.

per values ____

BEGINNING OF DELIVERY

Test pressure bar : 26.0 Tolerance bar : +- 1.0

Prestroke mm : 5.35 Tolerance mm : + 0.05 Check

tolerance mm : +- 0.10

Rack travel in mm : 10.50 Tolerance mm : + 1.50

Firing order : 1-5-3-6-2-

: 0-60-120-180-240 Phasing

: -300

Tolerance : \leftarrow 0.30

Check

tolerance *NW : + 0.50

Start of delivery mark

Barrel no. : 1

BASIC SETTING

Rated speed rpm : 980

Rack travel in mm: 13.35 Tolerance mm : +- 0.05

Del. quantity +	guide sleeve
cm3/1000 strokes : 321.5 +	travel mm : 3.08
<u> </u>	Tolerance mm : +- 0.25
Tolerance +	
cm3/1000 strokes : +- 1.0 +	Rated speed rpm : 400
	guide sleeve
Check tolerance	travel mm : 3.92
cm3/1000s. : +- 5.0 +	Tolerance mm : $+$ 0.25
Spreed	Rated speed rpm : 1310
Tolerance	guide sleeve
cm3/1000 strokes : 6.0	travel mm : 13.50
	Tolerance mm : +- 0.50
Check tolerance	
cm3/1000s. : 12.0 +	
275	GUIDE SLEEVE POSITION
Rated speed rpm : 275	Dated and during 4470
Doob turned to me a 5 00	Rated speed rpm : 1130
Rack travel in mm: 5.80	Doub Annual to my a 40 70
Tolerance mm : + 0.10	Rack travel in mm : 12.70
Del. quantity + cm3/1000 strokes : 13.0 +	Tolerance mm : +- 1.30
cm3/1000 strokes : 13.0	
cm3/1000 strokes : +- 3.0	FULL LOAD DELIVERY AT FULL LOAD STOP
Check tolerance	FOLL LOAD DELIVERY AT FULL LOAD STOP
cm3/1000s. : +- 6.0	Rated speed rpm : 980
Spreed	Aneroid pressure
Tolerance	hPa : -
cm3/1000 strokes : 8.0	Del. quantity
Check tolerance	cm3/1000 strokes : 321.5
cm3/1000s. : 13.0	Tolerance
T 13.0	cm3/1000 strokes : +- 1.0
\mathbf{I}	Check tolerance
(B) SETTING OF INJECTION PUMP	cm3/1000s. : +- 5.0
WITH GOVERNOR +	Spreed
W2111 007E111011	Tolerance
	cm3/1000 strokes : 6.0
GUIDE SLEEVE TRAVEL	Check tolerance
	cm3/1000s. : 12.0
Rated speed rpm : 275	
guide sleeve	
travel mm : 2.14	
Tolerance mm : + 0.15	CONTROL LEVER
+	
Rated speed rpm : 1050	control lever
guide sleeve +	position degree : 120.0
travel mm : 9.89	tolerance degree : +- 4.0
Tolerance mm : \leftarrow 0.20 $+$	
t	RATED SPEED
Rated speed rpm : 692	
guide sleeve	rack travel mm : 12.35
guide sleeve travel mm : 6.45	rack travel mm : 12.35 Rated speed rpm : 1037
guide sleeve	rack travel mm : 12.35
guide sleeve travel mm : 6.45 Tolerance mm : +- 0.25	rack travel mm : 12.35 Rated speed rpm : 1037 Tolerance 1/min : +- 5
guide sleeve travel mm : 6.45 Tolerance mm : + 0.25 Rated speed rpm : 284	rack travel mm : 12.35 Rated speed rpm : 1037 Tolerance 1/min : + 5 rack travel mm : 4.00
guide sleeve travel mm : 6.45 Tolerance mm : + 0.25 Rated speed rpm : 284 guide sleeve	rack travel mm : 12.35 Rated speed rpm : 1037 Tolerance 1/min : + 5 rack travel mm : 4.00 Rated speed rpm : 1150
guide sleeve travel mm : 6.45 Tolerance mm : + 0.25 Rated speed rpm : 284 guide sleeve travel mm : 2.27	rack travel mm : 12.35 Rated speed rpm : 1037 Tolerance 1/min : + 5 rack travel mm : 4.00
guide sleeve travel mm : 6.45 Tolerance mm : + 0.25 Rated speed rpm : 284 guide sleeve	rack travel mm : 12.35 Rated speed rpm : 1037 Tolerance 1/min : + 5 rack travel mm : 4.00 Rated speed rpm : 1150 Tolerance 1/min : + 15
guide sleeve travel mm : 6.45 Tolerance mm : + 0.25 Rated speed rpm : 284 guide sleeve travel mm : 2.27 Tolerance mm : + 0.25	rack travel mm : 12.35 Rated speed rpm : 1037 Tolerance 1/min : + 5 rack travel mm : 4.00 Rated speed rpm : 1150 Tolerance 1/min : + 15 rack travel mm : 0.70
guide sleeve travel mm : 6.45 Tolerance mm : + 0.25 Rated speed rpm : 284 guide sleeve travel mm : 2.27	rack travel mm : 12.35 Rated speed rpm : 1037 Tolerance 1/min : + 5 rack travel mm : 4.00 Rated speed rpm : 1150 Tolerance 1/min : + 15

Rated speed rpm	: 1275
LOW IDLE	
control lever position degree tolerance degree	: 76.0 : +- 4.0
Testing:	
Rated speed rpm rack travel mm Tolerance mm	: 275 : 5.80 : +- 0.10
rack travel mm Rated speed rpm Tolerance 1/min	: 2.00 : 405 : +- 20
Rated speed rpm	: 175
CRT mm min.	: > 8.00
TORQUE CONTROL	
Rated speed rpm rack travel mm Tolerance mm	: 980 : 13.35 : + 0.05
Rated speed rpm rack travel mm Tolerance mm	: 750 : 12.75 : ← 0.05
Rated speed rpm rack travel mm Tolerance mm	
Rated speed rpm rack travel mm Tolerance mm	: 500 : 12.00 : + 0.10
Rated speed rpm rack travel mm Tolerance mm	: 400 : 11.95 : +- 0.10
ANEROID/ALTITUDE COMPENSATOR TEST	
SETTING	
Rated speed rpm Pressure hPa rack travel mm Tolerance mm	: 980 : 1500 : 13.35 : ← 0.05

MEASUREMENT

Pressure hPa Rated speed rpm rack travel mm Tolerance mm	980 8.90 + 0.10
Rated speed rpm	: 980
Pressure hPa	: 750
rack travel mm	: 12.25
Tolerance mm	: + 0.05
Pressure hPa	: 420
rack travel mm	: 10.00
Tolerance mm	: + 0.10

FUEL DELIVERY CHARACTERISTICS

Aneroid pressure	
hPa	
Rated speed rpm	: 750
Del. quantity	
cm3/1000 strokes Tolerance	: 316.0
cm3/1000 strokes	: ← 2.0
Check tolerance	
cm3/1000s.	: +- 6.0
Spreed	•
•	
Tolerance	
cm3/1000 strokes	: 8.0
Check tolerance	
cm3/1000s.	: 13.0
Aneroid pressure	
hPa	: -
Rated speed rpm	: 600
Del. quantity	. 000
	. 400.0
cm3/1000 strokes	: 188.0
Tolerance	
cm3/1000 strokes	: ← 1.0
Check tolerance	
cm3/1000s.	: +- 5.0
CHI37 10000.	

BREAKAWAY

Rack travel in mm : 12.35
Rated speed rpm : 1037
Tolerance 1/min : + 5

LOW IDLE

Rated speed rpm rack travel mm	:	275 5.80
Tolerance mm Del. quantity	: +-	0.10
cm3/1000 strokes	:	13.0
Tolerance cm3/1000 strokes	; +-	3.0
Check tolerance cm3/1000s.	: +	6.0
Spreed Tolerance		
cm3/1000 strokes Check tolerance	:	8.0
cm3/1000s.	:	13.0

Note remarks

Refer to Service Info for test and adjustment instructions.
See microcard(s) W400/...

Edition : 15.09.95 Test oil : ISO 4113

Combination No. : 0 402 896 004

Injection pump

Pump designation : PE6P12OA72ORS8010 EP type number : 0 412 826 014

Governor

Governer design. : RE30

Governer no. : 0 421 890 009

Cust. part No. : 1328145

Customer-spec. information Customer : SCANIA Motor : DSC1127

TEST BENCH REQUIREMENTS

Inlet line : 4.1

Test oil inlet

temp. °C : 40 Tolerance °C : + 2.0

Overflow valve : 1 417 413 025

Inlet press. bar : 2.5 Tolerance bar : + 0.1

Tolerance l/h: +- 20.0

Test nozzle holde

assembly : 1 688 901 104

Opening pressure

bar : 251.5 Tolerance bar : +- 1.5

Test lines : 1 680 750 008

Outside diameter : 6.0

x inside diameter: 2.0 x length mm : 600

REMARKS

Pump-specific values in Section (B) must be observed!

(A) INJECTION PUMP SETTINGS No basic setting. Setting of constant delivery

under Section C.

BEGINNING OF DELIVERY

Test pressure bar : 26.0 Tolerance bar : + 1.0

Prestroke mm : 2.85

Check

tolerance mm : + 0.10 Check

uneck

tolerance mm : \leftarrow 0.10

Rack travel in mm : 10.50

Rack travel in mm: 10.50
Tolerance mm: + 1.50
Tolerance mm: + 1.50

Firing order : 1-5-3-6-2-

: 4

Phasing : 0-60-120-180-240

: -300

Tolerance : \leftarrow 0.30

Check

tolerance *NW : +- 0.50

Start of delivery mark

Tolerance : + 0.50

Check

tolerance *NW : + 0.75

Barrel no. : 1 Vibration damper (RoBo diaphragm) : 3.1 (B) POSITIONER TESTING Warm-up time: 3 minutes at n=600 min-1, Uact = 2.5 VTESTING & SETTING RACK TRAVEL SENSOR POSITION Engine speed min-1: 0 Setting point (P, R and H pump) 3,100 Uact V 13.00 CRT mm Tolerance mm : +/- 0.05 Check : +/- 0.10 tolerance mm Check value (P, R and H pump) Uact V 1.700 CRT mm 6.15 Tolerance mm : +/- 0.25 Check tolerance mm : +/- 0.30 Setting point (qmuq M) Uact V 3.100 CRT mm 12.50 Tolerance mm : +/- 0.05 Check : +/- 0.10 tolerance mm Check value (amuq M) Uact V 1.700 5.50 CRT mm : +/- 0.25 Tolerance mm Check : +/- 0.30 tolerance mm Stop position : Value with Uact V

deenergised adjusting magnet

and control rod in stop position. CRT mm 0.75 Tolerance mm : +/- 0.25 Check tolerance mm : +/- 0.35 **ENGINE-SPEED SENSOR** (All P and R pumps not H and M pumps) Test with control rod in stop position Engine speed min-1: 60 Amplitude V 1.4 Tolerance V : +/- 0.6 Check tolerance V : +/- 1.20 600 Engine speed min-1: Difference Amplitude to Amplitude V : max.1.4 (C) INJECTION PUMP WITH POSITIONER TEST POINT V1 Rated speed rpm : 700 Uact V 3.500 Del. quantity cm3/1000 strokes : 332.0 Tolerance cm3/1000 strokes : +- 1.0 Check tolerance cm3/1000s. 4.0 Spreed Tolerance cm3/1000 strokes : 8.0 Check tolerance cm3/1000s. 12.0 FUEL DELIVERY CHARACTERISTICS 900 Rated speed rpm Uact V 3.500 Del. quantity cm3/1000 strokes : 301.0 Tolerance cm3/1000 strokes : +-

: +-

6.0

Check tolerance

cm3/1000s.

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

: 15,09,95 Edition Test oil : ISO 4113

Combination No. : 0 402 896 013

Injection pump

Pump designation : PE6P120A720RS8025 EP type number : 0 412 826 026

Governor

Governer design. : RE30

: 0 421 890 019 Governer no.

Cust. part No. : 1361124

Customer-spec, information : SCANIA Customer : DSC1124 Motor

TEST BENCH REQUIREMENTS

Inlet line : 4.1

Test oil inlet

temp. °C 40 Tolerance °C

Overflow valve : 1 417 413 025

Inlet press. bar : 2.5 Tolerance bar

Overflow quantity

min. L/h : 240 Tolerance L/h : +- 20.0 240

Test nozzle holde

: 1 688 901 104 assembly

Opening pressure

251.5 bar : + 1.5 Tolerance bar

Test Lines : 1 680 750 008

Outside diameter : 6.0

2.0 x inside diameter: 600 x length mm :

REMARKS

Pump-specific values in Section (B) must be observed!

(A) INJECTION PUMP SETTINGS

No basic setting.

Setting of constant delivery

under Section C.

BEGINNING OF DELIVERY

Test pressure bar : Tolerance bar : +-1.0

2.85 Prestroke mm :

2.85 Prestroke nm : + 0.05Tolerance mm Tolerance mm : + 0.05

Check

tolerance mm : + - 0.10Check

tolerance mm

: +- 0.10

Rack travel in mm: 10.50

Rack travel in mm: 10.50 Tolerance mm : + 1.50
Tolerance mm : + 1.50

: 1-5-3-6-2-Firing order

Phasing : 0-60-120-180-240

: -300

Tolerance : +- 0.30

Check

: +- 0.50 tolerance °NW

Start of delivery mark

Tolerance : \leftarrow 0.50

Check tolerance *NW	: ← 0.75
Barrel no.	: 1
Vibration damper (RoBo diaphragm)	: 3.1
(B) POSITIONER TE Warm-up time: 3 m n=600 min-1, Uact	inutes at
TESTING & SETTING POSITION	RACK TRAVEL SENSOR
Engine speed min-	1: 0
Setting point (P, R and H pump)	
Uact V CRT mm Tolerance mm Check tolerance mm	: 3.100 : 13.00 : +/- 0.05 : +/- 0.10
Check value (P, R and H pump)	
Uact V CRT mm Tolerance mm Check tolerance mm	: 1.700 : 6.15 : +/- 0.25 : +/- 0.30
Setting point (M pump)	
Uact V CRT mm Tolerance mm Check tolerance mm	: 3.100 : 12.50 : +/- 0.05 : +/- 0.10
Check value (M pump)	
Jact V CRT mm Tolerance mm Check	: 1.700 : 5.50 : +/- 0.25
tolerance mm	: +/- 0.30
Stop position	

```
Uact V
                   : Value with
            deenergised adjusting magnet
                    and control rod in
                    stop position.
                        0.75
CRT mm
Tolerance mm
                   : +/- 0.25
Check
tolerance mm
                  : +/- 0.35
ENGINE-SPEED SENSOR
(All P and R pumps not
H and M pumps)
Test with control rod
in stop position
Engine speed min-1:
Amplitude V
                        1.4
Tolerance V
                  : +/- 0.6
Check
tolerance V
                  : +/- 1.20
Engine speed min-1:
                      600
Difference
Amplitude to
Amplitude V
                  : max.1.4
(C) INJECTION PUMP WITH POSITIONER
TEST POINT V1
Rated speed rpm
                       700
Uact V
                       3.500
Del. quantity
cm3/1000 strokes :
                       340.0
Tolerance
cm3/1000 strokes
                         1.0
Check tolerance
cm3/1000s.
                         4.0
Spreed
Tolerance
cm3/1000 strokes :
                         8.0
Check tolerance
                        12.0
cm3/1000s.
FUEL DELIVERY CHARACTERISTICS
                       900
Rated speed rpm
                       3.500
Uact V
Del. quantity
cm3/1000 strokes :
                       309.0
Tolerance
cm3/1000 strokes
                         4.0
Check tolerance
```

: +-

6.0

cm3/1000s.

STARTING FUEL DELIVERY

Rated speed rpm 100 Uact V 3.000

Del. quantity cm3/1000 strokes : 245.0

Tolerance cm3/1000 strokes : +- 20.0

Check tolerance cm3/1000s.

: +- 24.0

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

Edition : 04.03.96 Test oil : ISO 4113

Combination No. : 0 403 246 053

Injection pump

Pump designation : PES6MW100/720RS1527

EP type number : 0 413 206 026

Governor

Governer design. : RQV300...1300MW132

: -20

Governer no. : 0 420 083 339

Cust. part No. : 0260749402

Customer-spec. information Customer : MB-NFZ Motor : 0M366LA Power KW : 177.0

TEST BENCH REQUIREMENTS

Inlet line : 3.1

Test oil inlet

temp. °C Tolerance °C 2.0

: 1 419 992 198 Overflow valve

Inlet press. bar : 1.5

Test nozzle holde

: 1 688 901 101 assembly

Opening pressure

208.5 bar Tolerance bar 1.5

: 1 680 750 089 Test lines

Outside diameter : 8.0 x inside diameter: 3.0 x length mm : 600

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant.

per values _____

BEGINNING OF DELIVERY

Test pressure bar : 31.0 Tolerance bar : + 1.0

Prestroke mm 4.55 Tolerance mm : + 0.05Check

: + 0.10tolerance mm

Rack travel in mm : 20.00 Tolerance mm : + 1.00

: 1-5-3-6-2-Firing order

Phasing : 0-60-120-180-240

: -300 : +- 0.50

Tolerance Check

tolerance °NW : + 0.75

BASIC SETTING

1300 Rated speed rpm

Rack travel in mm : 14.40 Tolerance mm : + 0.05

Del. quantity

cm3/1000 strokes : 130.0

Tolerance cm3/1000 strokes : + 1.0

Check tolerance cm3/1000s. : +- 4.0

Spreed Tolerance

cm3/1000 strokes : 4.0

	+	Rated speed rpm	: 1480
Check tolerance cm3/1000s.	7.5	Rack travel in mm Tolerance mm	
Rated speed rpm :	300		
Rack travel in mm : Tolerance mm :	4.00 + 0.30	FULL LOAD DELIVER	RY AT FULL LOAD STOP
Del. quantity cm3/1000 strokes :	+	Rated speed rpm Aneroid pressure	
Tolerance cm3/1000 strokes :	+	hPa Del. quantity	: 1000
Check tolerance	+ 4.5	cm3/1000 strokes Tolerance	: 130.0
Spreed Tolerance	T ***	cm3/1000 strokes Check tolerance	
cm3/1000 strokes : Check tolerance	3.5	cm3/1000S. Spreed	
cm3/1000s.	5.5	Tolerance cm3/1000 strokes	: 4.0
(B) SETTING OF INJEC	TTON DIMP	Check tolerance cm3/1000s.	: 7.5
WITH GOVERNOR	71017 70111	CIII 7 (0005.	• ••
GUIDE SLEEVE TRAVEL		CONTROL LEVER	
Rated speed rpm : guide sleeve	300	control lever position degree	• 120 0
travel mm :	1.01	tolerance degree	
Tolerance mm :	+ 0.20	RATED SPEED	
Rated speed rpm : guide sleeve	1354	rack travel mm	: 13.40
travel mm :	6.71 I	Rated speed rpm	
	+- 0.15	Tolerance 1/min	
Rated speed rpm : guide sleeve	1090	rack travel mm Rated speed rpm	
travel mm :	4.70 + 0.25	Tolerance 1/min	: + 15
	+	rack travel mm	
Rated speed rpm : guide sleeve	690	Tolerance mm Rated speed rpm	: +- 0.50 : 1550
travel mm :	2.97		
Tolerance mm :	+ 0.25		
Rated speed rpm : guide sleeve	1683	LOW IDLE	
travel mm :	12.00		
Tolerance mm :	+ 0.25	control lever position degree	: 74.0
Rated speed rpm : guide sleeve	1780	tolerance degree	
travel mm :	13.50	Testing:	
Tolerance mm :	+ 0.50	Rated speed rpm rack travel mm	
GUIDE SLEEVE POSITION	N I	Tolerance mm	: + 0.10
	•		

Rated speed rpm	: 200	+ Del. quantity
ADT we will	. > / 50	+ cm3/1000 strokes : 130.0
CRT mm min.	; > 4.50	Tolerance : + 2.0
		Check tolerance
TORQUE CONTROL		+ cm3/1000s. : +- 5.0
TONGOL CONTROL		Spreed
Rated speed rpm	: 1300	+ Tolerance
rack travel mm	: 14.40	- cm3/1000 strokes : 6.0
Tolerance mm	: +- 0.05	+ Check tolerance
		+ cm3/1000s. : 9.0
Rated speed rpm rack travel mm Tolerance mm	: 750	+
rack travel mm	: 14.40	+ Aneroid pressure
Tolerance mm	: ← 0.10	+ hPa : -
		Rated speed rpm : 500
***************************************		+ Del. quantity
ANEROID/ALTITUDE		+ cm3/1000 strokes : 43.0
COMPENSATOR TEST		+ Tolerance
		+ cm3/1000 strokes : +- 1.0
SETTING		+ Check tolerance + cm3/1000s. : + 3.0
2E1171AQ		T (1115) 10003. : 72 3.0
Rated speed rpm	: 500	
Pressure hPa	: 1000	BREAKAWAY
rack travel mm	: 14.40	
rack travel mm Tolerance mm	: + 0.10	+
		+ Rack travel in mm : 13.40
MEASUREMENT		+ Rated speed rpm : 1345
		+ Tolerance 1/min : +- 5
Pressure hPa	: -	+
Rated speed rpm	: 500	†
Tolerance mm	: +- 0.10	OTABTING FUEL AFLICTOR
Rated speed rpm	• 500	T STARTING FUEL DELIVERY
wared speed this	. 500	T Rated speed rpm : 100
Pressure hPa	• 600	Del. quantity
rack travel mm		- cm3/1000 strokes : 160.0
Tolerance mm	: +- 0.10	+ Tolerance
		+ cm3/1000 strokes : + 5.0
Pressure hPa	: 300	- Check tolerance
rack travel mm	: 1.50	+ cm3/1000s. : +- 8.0
Tolerance mm	: ← 0.10	†
		†
START CUT-OUT		İ
SIAKI CUITUUI		I LOW IDLE
Rated speed rpm	: > 100	
Rated speed rpm		Rated speed rpm : 300
		rack travel mm : 4.00
Check		Tolerance mm : + 0.30
speed 1/min	: > 80	+ Del. quantity
Check		+ cm3/1000 strokes : 12.0
speed 1/min	: < 220	Tolerance
		+ cm3/1000 strokes : +- 2.0
		- Check tolerance
FUEL DELIVERY CHA	RACTERISTICS	+ cm3/1000s. : + 4.5
A		+ Spreed
Aneroid pressure	: 1000	+ Tolerance + cm3/1000 strokes : 3.5
hPa	: 750	I chis/ food strokes . 3.3
Rated speed rpm	. 100	T

cm3/1000s.	:	5.5	

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

: 04.03.96 Edition : ISO 4113 Test oil

Combination No. : 0 403 246 054

Injection pump

Pump designation : PES6MW100/720RS1526

EP type number : 0 413 206 025

Governor

Governer design. : RQV300...1300MW154 : 0 420 083 341 Governer no.

Cust. part No. : 0260748702

Customer-spec. information : MB-NFZ Customer : 0M366LA Motor : 125.0 Power KW

TEST BENCH REQUIREMENTS

Inlet line : 3.1

Test oil inlet

temp. °C Tolerance °C 2.0

: 1 419 992 198 Overflow valve

Inlet press. bar : 1.5

Test nozzle holde

: 1 688 901 101 assembly

Opening pressure

: 208.5 : +- 1.5 Tolerance bar

Test lines : 1 680 750 089

Outside diameter : 8.0 x inside diameter : 3.0 x length mm 600

REMARKS

(A) INJECTION PUMP SETTING VALUES Set equal delivery quant.

per values _____

BEGINNING OF DELIVERY

Test pressure bar : 31.0 Tolerance bar : + 1.0

Prestroke mm 4.55 Tolerance mm : +- 0.05 Check

tolerance mm : + 0.10

Rack travel in mm : 20.00 Tolerance mm : +- 1.00

: 1-5-3-6-2-Firing order

: 0-60-120-180-240 Phasing : -300

Tolerance : + 0.50

Check

tolerance *NW : + 0.75

BASIC SETTING

Rated speed rpm : 1300

11.90 Rack travel in mm: Tolerance mm : +- 0.05

Del. quantity

cm3/1000 strokes : 98.0

Tolerance

cm3/1000 strokes : +- 1.0

Check tolerance

cm3/1000s. : +-3.0

Spreed

Tolerance

cm3/1000 strokes : 3.5

		+ Rated speed rpm	: 1445
Check tolerance cm3/1000s.	: 6.0	Rack travel in mm	: 10.00 : + 2.70
Rated speed rpm	: 300		
Rack travel in mm Tolerance mm	: 4.30 : + 0.20	FULL LOAD DELIVERY	AT FULL LO
Del. quantity cm3/1000 strokes		Rated speed rpm Aneroid pressure	: 1300
Tolerance cm3/1000 strokes		→ hPa	: 1000
Check tolerance		Del. quantity cm3/1000 strokes	: 98.0
cm3/1000s. Spreed	: +- 4.5	+ Tolerance + cm3/1000 strokes	: + 1.0
Tolerance cm3/1000 strokes	: 3.5	+ Check tolerance + cm3/1000s.	: + 3.0
Check tolerance		Spreed	
cm3/1000s.	: 5.5	+ Tolerance cm3/1000 strokes	: 3.5
(B) SETTING OF IN	JECTION PUMP	+ Check tolerance + cm3/1000s.	: 6.0
WITH GOVERNOR		+	
GUIDE SLEEVE TRAV	EL	CONTROL LEVER	
Rated speed rpm	: 300	T control lever	444
guide sleeve travel mm	: 1.01	<pre>position degree tolerance degree</pre>	
Tolerance mm	: ← 0.20	RATED SPEED	
Rated speed rpm	: 1352	+	40.00
guide sleeve travel mm	: 6.10	+ rack travel mm + Rated speed rpm	: 10.90 : 1345
Tolerance mm	: +- 0.15	† Tolerance 1/min	: +- 5
Rated speed rpm	: 1140	rack travel mm	: 4.00 : 1500
guide sleeve travel mm	: 4.84	+ Rated speed rpm + Tolerance 1/min	: 1500 : +- 15
Tolerance mm	: + 0.25	+ rack travel mm	: 0.50
Rated speed rpm guide sleeve	: 740	+ Tolerance mm	: + 0.50 : 1600
travel mm	: 3.23	t kateu speeu rpiii	. 1000
Tolerance mm	: + 0.25		
Rated speed rpm guide sleeve	: 1800	LOW IDLE	
travel mm Tolerance mm	: 12.00 : + 0.25	control lever	
loterance mm		+ position degree	
Rated speed rpm guide sleeve	: 1910	tolerance degree	: +- 4.0
travel mm	: 13.50	Testing:	
Tolerance mm	: +- 0.50	Rated speed rpm	: 300
GUIDE SLEEVE POSIT	TTON	rack travel mm	: 4.30 : +- 0.10
COINT OFFERE LOST	2014	TOCCI GIOG IIIII	0.10

LOAD STOP

Rated speed rpm	: 200	+	Del. quantity	
CRT mm min.	/	†	cm3/1000 strokes	: 92.0
CKI MM MIN.	: > 4.00	Ī	Tolerance cm3/1000 strokes	• +- 15
			Check tolerance	, 1 1.5
TORQUE CONTROL		+	cm3/1000s.	: +- 4.0
	4505	+	Spreed	
Rated speed rpm	: 1300	†	Tolerance	. 50
rack travel mm Tolerance mm	· + 0.05	I	cm3/1000 strokes Check tolerance	: 5.0
		1	cm3/1000s.	: 7.0
Rated speed rpm rack travel imm Tolerance mm	: 750	+		
rack travel mm	: 11.90	†	Aneroid pressure	
loterance mm	; +- 0.10	Ī	hPa Rated speed rpm	500
		I	Del. quantity	. 500
ANEROID/ALTITUDE		+	cm3/1000 strokes	: 61.0
COMPENSATOR TEST		+	Tolerance	
		†	cm3/1000 strokes	: +- 1.0
SETTING		I	Check tolerance cm3/1000s.	: +- 3.0
05117140		1	CIID7 10005.	
Rated speed rpm	: 500	+		
Pressure hPa	: 1000	+	BREAKAWAY	
rack travel mm Tolerance mm	: 17.90 : + 0.05	<u>†</u>		
toter diffe likil		I	Rack travel in mm	: 10.90
MEASUREMENT		+	Rated speed rpm	: 1345
		+	Tolerance 1/min	: +- 5
Pressure hPa	500	†		
Rated speed rpm Tolerance mm	: +- 0.10	Ī		
. occi ai ioc iiii		+	STARTING FUEL DEL	IVERY
Rated speed rpm	: 500	+		
Danasius hDs	. 750	† † †	Rated speed rpm	: 100
Pressure hPa rack travel mm	: 330	I	Del. quantity cm3/1000 strokes	• 125.0
Tolerance mm	+ 0.10	1	Tolerance	. ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
		+	cm3/1000 strokes	: +- 5.0
Pressure hPa		+	Check tolerance	. 0.0
rack travel mm Tolerance mm	: 0.65 : +- 0.10	1	cm3/1000s.	: +- 8.0
TOTE OF THE		Ţ		
START CUT-OUT		+	1.014 7.01 5	
Rated speed rpm	: > 100	Ī	LOW IDLE	
Rated speed rpm		Ţ	Rated speed rpm	: 300
		+	rack travel mm	: 4.30
Check		+	Tolerance mm	: + 0.20
speed 1/min	: > 80	†	Del. quantity	. 42.0
Check speed 1/min	: < 240	Ī	cm3/1000 strokes Tolerance	: 12.0
Opeca (/mm)		Ţ	cm3/1000 strokes	: +- 2.0
		+	Check tolerance	
FUEL DELIVERY CHAP	RACTERISTICS	+	cm3/1000s.	: + 4.5
Aneroid pressure		İ	Spreed Tolerance	
hPa	: 1000	Ţ	cm3/1000 strokes	: 3.5
Rated speed rpm	: 750	+		· · · · ·

Check tolerance cm3/1000s.	:	5.5	

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

: 05.03.96 Edition Test oil : ISO 4113

Combination No. : 0 403 474 003

Injection pump

Pump designation : PES4MW100/720RS1127 EP type number : 0 413 404 103

Governor

Governer design. : RSV350...1300MWDA318

; -3

: 0 420 085 087 Governer no.

Cust. part No.

Customer-spec. information Customer : MB-NFZ : 0M364A Motor 85.0 Power KW

TEST BENCH REQUIREMENTS

Inlet line : 3.1

Test oil inlet

temp. °C Tolerance °C

Overflow valve : 1 417 413 047

1.5 Inlet press. bar :

Test nozzle holde

: 1 688 901 101 assembly

Opening pressure

208.5 bar : +- 1.5 Tolerance bar

: 1 680 750 089 Test lines

Outside diameter : 8.0 x inside diameter: 3.0 x tength mm : 600

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant.

per values ____

BEGINNING OF DELIVERY

Test pressure bar : 31.0 Tolerance bar : +-1.0

Prestroke mm 3.75 : **←** 0.05 Tolerance mm Check tolerance mm : + 0.10

Rack travel in mm: 10.50 Tolerance mm : \leftarrow 1.50

: 1-3-4-2 Firing order

: 0-90-180-270 Phasing

Tolerance : + 0.50Check

tolerance °NW : +- 0.75

BASIC SETTING

Rated speed rpm : 1280

Rack travel in mm: 12.50 Tolerance mm : + 0.10

Del. quantity

cm3/1000 strokes : 85.0

Tolerance

cm3/1000 strokes : +-1.0

Check tolerance

cm3/1000s. : +-3.0

Spreed

Tolerance

cm3/1000 strokes : 3.5

Check tolerance +	tolerance degree : +- 4.0
cm3/1000s. : 6.0	-
750	RATED SPEED
Rated speed rpm : 350	rack travel mm : 11.40
Rack travel in mm: 9.30	Rated speed rpm : 1325
Tolerance mm : +- 0.20	Tolerance 1/min : + 5
Del. quantity	Totalite mility 1 5
cm3/1000 strokes : 11.0	rack travel mm : 4.00
Tolerance	Rated speed rpm : 1405
cm3/1000 strokes : +- 2.0 +	Tolerance 1/min : + 15
Check tolerance	
cm3/1000s. : +- 4.5	rack travel mm : 1.00
Spreed	Tolerance mm : + 0.70
Tolerance + cm3/1000 strokes : 3.5	Rated speed rpm : 1480
Check tolerance	
cm3/1000s. : 5.5	
1	LOW IDLE
}	
(B) SETTING OF INJECTION PUMP	
WITH GOVERNOR +	control lever
†	position degree : 76.0
 _	tolerance degree : + 4.0
GUIDE SLEEVE POSITION	Testing:
GOIDE SELEVE POSITION	resemig.
Rated speed rpm : 800	Rated speed rpm : 350
1	rack travel mm : 9.30
Rack travel in mm: 0.65	Tolerance mm : + 0.05
Tolerance mm : + 0.35 +	
+	rack travel mm : 2.00
governor spring	Rated speed rpm : 500
pre-tension + click setting x : 4.00 +	Tolerance 1/min : + 30
click setting x : 4.00	Rated speed rpm : 100
	hatea speed (pii) . 100
FULL LOAD DELIVERY AT FULL LOAD STOP	CRT mm min. :> 19.00
+	
Rated speed rpm : 1280 +	
Aneroid pressure	TORQUE CONTROL
hPa : - + Del. quantity +	Rated speed rpm : 1280
cm3/1000 strokes : 85.0	rack travel mm : 12.50
Tolerance +	Tolerance mm : + 0.10
cm3/1000 strokes : + 1.0 +	
Check tolerance +	Rated speed rpm : 750
cm3/1000s. : + 3.0 +	rack travel mm : 13.40
Spreed	Tolerance mm : + 0.10
Tolerance	Data di succedi successi a CCO
cm3/1000 strokes : 3.5	Rated speed rpm : 950 rack travel mm : 13.00
Check tolerance + cm3/1000s. : 6.0 +	Tolerance mm : + 0.10
III. 10005	TOTAL TRANSPORT
+	
CONTROL LEVER +	
+	PURT NELTURNY AUTHORATEDITATION
control lever + position degree : 104.0 +	FUEL DELIVERY CHARACTERISTICS
position degree : 104.0 +	

Aneroid pressure	
hPa Rated speed rpm	750
Del. quantity	
cm3/1000 strokes Tolerance	: 81.0
cm3/1000 strokes	: + 1.5
Check tolerance cm3/1000s.	: +- 4.0
Spreed	
Tolerance cm3/1000 strokes	: 5.0
Check tolerance cm3/1000s.	; 7.0
Aneroid pressure hPa	: -
Rated speed rpm	950
Del. quantity cm3/1000 strokes	: 85.0
Tolerance cm3/1000 strokes	: + 1.5
Check tolerance	
cm3/1000s.	: +- 4.0
Rack travel in mm Rated speed rpm Tolerance 1/min	
Rated speed rpm	: 1325
Rated speed rpm	: 1325 : + 5
Rated speed rpm Tolerance 1/min STARTING FUEL DEL: Rated speed rpm	: 1325 : + 5
Rated speed rpm Tolerance 1/min STARTING FUEL DEL:	: 1325 : + 5
Rated speed rpm Tolerance 1/min STARTING FUEL DEL: Rated speed rpm Del. quantity cm3/1000 strokes Tolerance	: 1325 : + 5 IVERY : 100 : 88.0
Rated speed rpm Tolerance 1/min STARTING FUEL DEL: Rated speed rpm Del. quantity cm3/1000 strokes Tolerance cm3/1000 strokes Check tolerance	: 1325 : + 5 IVERY : 100 : 88.0 : + 5.0
Rated speed rpm Tolerance 1/min STARTING FUEL DEL: Rated speed rpm Del. quantity cm3/1000 strokes Tolerance cm3/1000 strokes	: 1325 : + 5 IVERY : 100 : 88.0
Rated speed rpm Tolerance 1/min STARTING FUEL DEL: Rated speed rpm Del. quantity cm3/1000 strokes Tolerance cm3/1000 strokes Check tolerance	: 1325 : + 5 IVERY : 100 : 88.0 : + 5.0
Rated speed rpm Tolerance 1/min STARTING FUEL DEL: Rated speed rpm Del. quantity cm3/1000 strokes Tolerance cm3/1000 strokes Check tolerance cm3/1000s.	: 1325 : + 5 IVERY : 100 : 88.0 : + 5.0 : + 8.0
Rated speed rpm Tolerance 1/min STARTING FUEL DEL: Rated speed rpm Del. quantity cm3/1000 strokes Tolerance cm3/1000 strokes Check tolerance cm3/1000s. LOW IDLE Rated speed rpm rack travel mm	: 1325 : + 5 IVERY : 100 : 88.0 : + 5.0 : + 8.0 : + 8.0
Rated speed rpm Tolerance 1/min STARTING FUEL DEL: Rated speed rpm Del. quantity cm3/1000 strokes Tolerance cm3/1000 strokes Check tolerance cm3/1000s. LOW IDLE Rated speed rpm rack travel mm Tolerance mm Del. quantity	: 1325 : + 5 IVERY : 100 : 88.0 : + 5.0 : + 8.0 : + 8.0 : + 0.20
Rated speed rpm Tolerance 1/min STARTING FUEL DEL: Rated speed rpm Del. quantity cm3/1000 strokes Tolerance cm3/1000 strokes Check tolerance cm3/1000s. LOW IDLE Rated speed rpm rack travel mm Tolerance mm Del. quantity cm3/1000 strokes	: 1325 : + 5 IVERY : 100 : 88.0 : + 5.0 : + 8.0 : + 8.0
Rated speed rpm Tolerance 1/min STARTING FUEL DEL: Rated speed rpm Del. quantity cm3/1000 strokes Tolerance cm3/1000 strokes Check tolerance cm3/1000s. LOW IDLE Rated speed rpm rack travel mm Tolerance mm Del. quantity cm3/1000 strokes Tolerance cm3/1000 strokes	: 1325 : + 5 IVERY : 100 : 88.0 : + 5.0 : + 8.0 : + 8.0 : + 0.20
Rated speed rpm Tolerance 1/min STARTING FUEL DEL: Rated speed rpm Del. quantity cm3/1000 strokes Tolerance cm3/1000 strokes Check tolerance cm3/1000s. LOW IDLE Rated speed rpm rack travel mm Tolerance mm Del. quantity cm3/1000 strokes Tolerance	: 1325 : + 5 IVERY : 100 : 88.0 : + 5.0 : + 8.0 : + 8.0 : + 0.20 : 11.0

Tolerance cm3/1000 strokes : 3.5 Check tolerance cm3/1000s. : 5.5

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

Edition : 05.03.96 Test oil : ISQ 4113

Combination No. : 0 403 476 059

Injection pump

Pump designation : PES6MW100/720RS1130 : 0 413 406 122 EP type number

Governor

Governer design. : RSV750...1250MW0A325

: -1

Governer no. : 0 420 085 112

Cust. part No. :

Customer-spec. information Customer : MB-NFZ Motor : OM 366 A Power KW : 125.0

TEST BENCH REQUIREMENTS

Inlet line : 3.1

Test oil inlet

temp. °C Tolerance °C : +- 2.0

: 1 419 992 198 Overflow valve

Inlet press. bar : 1.5

Test nozzle holde

: 1 688 901 101 assembly

Opening pressure

208.5 bar Tolerance bar : +- 1.5

Test Lines : 1 680 750 089

Outside diameter : 8.0

x inside diameter : 3.0 600 x Length mm :

REMARKS

(A) INJECTION PUMP SETTING VALUES Set equal delivery quant.

per values ____

BEGINNING OF DELIVERY

Test pressure bar : 31.0 Tolerance bar : +- 1.0 Test pressure bar :

Prestroke mm 3.75 : +- 0.05 Tolerance mm Check : +- 0.10 tolerance mm

Rack travel in mm : 10.50 Tolerance mm : + 1.50

: 1-5-3-6-2-Firing or (%)

: 4

: 0-60-120-180-240 Phasing

: -300

: + - 0.50Tolerance

Check

tolerance °NW : + 0.75

BASIC SETTING

Rated speed rpm : 1230

Rack travel in mm: 10.95

Tolerance mm : ← 0.05

Del. quantity cm3/1000 strokes : 78.0

Tolerance cm3/1000 strokes : + 1.0

Check tolerance cm3/1000s. : +- 3.0

Spreed Tolerance

cm3/1000 strokes : 3.5

		1	
Check tolerance		_	•
cm3/1000s.	: 6.0	+ position degr	
~	****	+ tolerance deg	ree : +- 4.0
Rated speed rpm	: 750	TATEL SPEED	
Rack travel in mm	: 5.80	T RATED SPEED	
Tolerance mm	; + 0.30	rack travel m	m : 1.00
Del. quantity		+ Tolerance mm	
cm3/1000 strokes	: 12.0	+ Rated speed r	pm : 1350
Tolerance cm3/1000 strokes	: +~ 2.0	† rack travel m	m : 4.00
Check tolerance		Rated speed r	
cm3/1000s.	: +- 4.5	+	
Spreed		+ ASSEMBLY GOVE	RNOR SETTING
Tolerance cm3/1000 strokes	: 3.5	Total aread a	om : 1270
Check tolerance	: 3.5	+ Rated speed r + rack travel m	
cm3/1000s.	: 5.5	1	. , , , ,
		+ Rated speed r	
(D) OFTITALS OF THE	ICCTION DUMP	Tolerance 1/m	
(B) SETTING OF INJ	IECITON DOMB	† rack travel m	កា : 4.00
WZ III GOVENNON		Rated speed r	pm : 1271
		+ rack travel m	
GUIDE SLEEVE POSIT	CTON	Rated speed r	pm : 1301
GOIDE SPEEKE LOST!	TOM	Tolerance 1/m	
Rated speed rpm	: 800	+ rack travel m	
	0.75	† Sakad and a	4070
Rack travel in mm Tolerance mm	: 0.65 : + 0.35	+ Rated speed r + rack travel m	
TOCCI GITCE HAIF	0.55	+ Tack cravec iii	. /.//
governor spring		+ Rated speed r	
pre-tension	. / 00	+ Tolerance 1/m	
click setting x	: 4.00	† rack travel m	m : 4.00
		Rated speed r	om : 1273
FULL LOAD DELIVERY	AT FULL LOAD STOP	+ rack travel m	n : 9.95
Dated aread www	: 1230	Poted speed a	om : 1303
Rated speed rpm Aneroid pressure	: 1230	+ Rated speed r	
hPa	: -	+ rack travel m	
Del. quantity		†	4474
cm3/1000 strokes	: 78.0	+ Rated speed r	
Tolerance cm3/1000 strokes	: +- 1.0	+ rack travet m	II : 9.93
Check tolerance	110	Rated speed r	om : 1304
cm3/1000s.	: +- 3.0	+ Tolerance 1/m	
Spreed		+ rack travel m	n : 4.00
Tolerance cm3/1000 strokes	: 3.5	Rated speed r	om : 1275
Check tolerance	• •••	+ rack travel m	
cm3/1000s.	: 6.0	+	
		+ Rated speed r	
		+ Tolerance 1/m + rack travel m	
CONTROL LEVER		T I dek travet ik	# • 4 .00

control lever position degree : 78.0 tolerance degree : +- 4.0

Testing:

Rated speed rpm : 750 rack travel mm : 5.80 Tolerance mm : + 0.15

rack travel mm : 2.00 Rated speed rpm : 775

Rated speed rpm : 100

CRT mm min. : > 19.00

TORQUE CONTROL

Rated speed rpm : 1230 rack travel mm : 10.95 Tolerance mm : + 0.05

Rated speed rpm : 600 rack travel mm : 10.95 Tolerance mm : ← 0.10

FUEL DELIVERY CHARACTERISTICS

Aneroid pressure

hPa : Rated speed rpm : 600
Del. quantity
cm3/1000 strokes : 56.0
Tolerance

cm3/1000 strokes : +- 1.5

Check tolerance

cm3/1000s. : +- 4.0

Spreed Tolerance

cm3/1000 strokes : 5.0

Check tolerance

cm3/1000s. : 7.0

STARTING FUEL DELIVERY

Rated speed rpm : 100

Del. quantity

cm3/1000 strokes : 83.0

Tolerance

cm3/1000 strokes : +- 5.0

Check tolerance

cm3/1000s. : +- 8.0

LOW IDLE

Rated speed rpm : 750 rack travel mm : 5.80 Tolerance mm : + 0.30

Del. quantity

cm3/1000 strokes : 12.0

Tolerance

cm3/1000 strokes : +- 2.0

Check tolerance

cm3/1000s. : +- 4.5

Spreed Tolerance

cm3/1000 strokes : 3.5

Check tolerance

cm3/1000s. : 5.5

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

: 01.03.96 Edition : ISO 4113 Test oil

Combination No. : 0 403 476 075

Injection pump

Pump designation : PES6MW100/720RS1130

EP type number : 0 413 406 122

Governor

Governer design. : RSV350...750MWDA336

: -4

: 0 420 085 160 Governer no.

Cust. part No. :

Customer-spec. information : MB-NFZ Customer Motor : OM366A Power KW 84.0

TEST BENCH REQUIREMENTS

Inlet line : 3.1

Test oil inlet

temp. °C Tolerance *C 2.0

: 1 419 992 198 Overflow valve

1.5 Inlet press. bar :

Test nozzle holde

: 0 681 343 009 assembly

Opening pressure

173.5 bar : +- 1.5 Tolerance bar

Test Lines : 1 680 750 089

Outside diameter : 8.0 x inside diameter: 2.5 600 x length mm :

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant.

per values ____

BEGINNING OF DELIVERY

Test pressure bar : Tolerance bar : +

Prestroke mm 3.75 : **←** 0.05 Tolerance mm Check

tolerance mm : + 0.10

Rack travel in mm : 10.50 Tolerance mm : \leftarrow 1.50

Firing order : 1-5-3-6-2-

Phasing : 0-60-120-180-240

: -300

Tolerance : + 0.50 Check

tolerance "NW : **←** 0.75

BASIC SETTING

700 Rated speed rpm

Rack travel in mm: 12.05 Tolerance mm : +- 0.05

Del. quantity

cm3/1000 strokes : 85.0

Tolerance

cm3/1000 strokes : +- 1.0

Check tolerance

cm3/1000s. 3.0

Spreed

Tolerance

3.5

cm3/1000 strokes :

		+	
Check tolerance		+ control lever	
cm3/1000s.	; 6.0	+ position degree :	78.0
		+ tolerance degree :	
Rated speed rpm	: 350		
vindon abase v biii		+ RATED SPEED	
Rack travel in mm	: 6.30	1	
Tolerance mm	: +- 0.50	+ rack travel mm :	1.00
	, +- 0.50		+ 0.70
Del. quantity	. 11.0		
cm3/1000 strokes	: 11.0	+ Rated speed rpm :	850
Tolerance		†	
cm3/1000 strokes	: +- 2.0	+ ASSEMBLY GOVERNOR SE	ETTING
Check tolerance		+	
cm3/1000s.	: +- 4.5	+ Rated speed rpm :	7 <i>5</i> 0
Spreed		+ rack travel mm :	11.00
Tolerance		+	
cm3/1000 strokes	: 3.5	+ Rated speed rpm :	779
Check tolerance	•	+ Tolerance 1/min :	+- 4
cm3/1000s.	; 5,5	+ rack travel mm :	4.00
(1000)	. 5.3	1 dek cravec mm	7.00
		Rated speed rpm :	751
(D) SETTING OF THE	ICCTION DUMP		
(B) SETTING OF IN	SECITON POMP	+ rack travel mm :	11.00
WITH GOVERNOR		T	700
		+ Rated speed rpm :	780
			+- 4
		+ rack travel mm :	4.00
GUIDE SLEEVE POSI	TION	+	
		+ Rated speed rpm :	752
Rated speed rpm	: 800	+ rack travel mm :	11.00
•		+	
Rack travel in mm	: 0.65	+ Rated speed rpm :	781
Tolerance mm	: +- 0.35		+- 4
		+ rack travel mm :	4.00
governor spring		1	4.00
pre-tension		Rated speed rpm :	753
	: 2.80	rack travel mm	11.00
click setting x	: 2.00	T rack travel inni	11.00
		T Botal analysis	700
		+ Rated speed rpm :	782
FULL LOAD DELIVERY	AT FULL LOAD STOP	,	+- 4
		+ rack travel mm :	4.00
Rated speed rpm	: 700	+	
Aneroid pressure		+ Rated speed rpm :	754
hPa	: -	+ rack travel mm :	11.00
Del. quantity		+	
cm3/1000 strokes	: 85.0	+ Rated speed rpm :	783
Tolerance		+ Tolerance 1/min :	+- 4
cm3/1000 strokes	: +- 1.0	+ rack travel mm :	4.00
Check tolerance		1	
cm3/1000s.	: +- 3.0	Rated speed rpm :	755
Spreed		rack travel mm :	11.00
		T Tack Cravec (IMI)	11.00
Tolerance	. 7 F	T Dated annual	70/
cm3/1000 strokes	: 3.5	+ Rated speed rpm :	784
Check tolerance		+ Tolerance 1/min :	+- 4
cm3/1000s.	: 6.0	+ rack travel mm :	4.00
		†	
		†	
		+ LOW IDLE	
CONTROL LEVED		_	

CONTROL LEVER

control lever 65.0 position degree tolerance degree : + 4.0 Testing: 350 Rated speed rpm rack travel mm 6,30 Tolerance mm : +- 0.50 rack travel mm 2.00 Rated speed rpm 390 Tolerance 1/min 30 100 Rated speed rpm CRT mm min. ; > 19.00 TORQUE CONTROL 700 Rated speed rpm rack travel mm 12.05 Tolerance mm : + 0.05 STARTING FUEL DELIVERY 100 Rated speed rpm : Del. quantity cm3/1000 strokes : 95.0 Tolerance cm3/1000 strokes : +-5.0 Check tolerance cm3/1000s. : + 8.0 LOW IDLE 350 Rated speed rpm : 6.30 rack travel mm : **←** 0.50 Tolerance mm Del. quantity 11.0 cm3/1000 strokes : Tolerance 2.0 cm3/1000 strokes : +-Check tolerance cm3/1000s. 4.5 Spreed

3.5

Check tolerance cm3/1000s. : 5.5

End of test specification sheet

E06

Tolerance

cm3/1000 strokes :

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

Edition : 26.02.96 Test oil : ISO 4113

Combination No. : 9 400 085 319

Injection pump

Pump designation : PES6A95D41ORS2772 EP type number : 9 400 084 018

Governor

Governer design. : RQV300...1400AB1066

: -10L

Governer no. : 9 420 080 287

Cust. part No. :

Customer—spec. information Customer : MBB Motor : OM 352 A

Power KW : 141.0

TEST BENCH REQUIREMENTS

Inlet line : 3.2

Test oil inlet

temp. °C : 40
Tolerance °C : + 2.0

Overflow valve : 1 417 413 006

Inlet press. bar : 1.5

Test nozzle holde

assembly : 0 681 343 009

Opening pressure

bar : 173.5 Tolerance bar : + 1.5

Test lines : 1 680 750 015

Outside diameter : 6.0

x inside diameter: 3.0 x length mm : 600

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant.

per values _____

BEGINNING OF DELIVERY

Test pressure bar : 26.0 Tolerance bar : +- 1.0

Prestroke mm : 3.25
Tolerance mm : +- 0.05

Check

tolerance mm : +- 0.10

Rack travel in mm : 10.50 Tolerance mm : + 1.50

Firing order : 1-5-3-6-2-

: 4

Phasing : 0-60-120-180-240

: -300

BASIC SETTING

Rated speed rpm : 1400

Rack travel in mm: 9.55
Tolerance mm: + 0.05

Del. quantity

cm3/1000 strokes : 78.5

Tolerance

cm3/1000 strokes : + 1.0

Check tolerance cm3/1000s.

: + 3.0

Spreed

Tolerance

cm3/1000 strokes :

3.5

Check tolerance cm3/1000s.

6.0

E07

Del. quantity cm3/1000 strokes : 11.0 Tolerance cm3/1000 strokes : + 3.0 Check tolerance cm3/1000s. : + 5.0 Spreed Tolerance cm3/1000 strokes : 3.5 Check tolerance cm3/1000s. : 5.5 (B) SETTING OF INJECTION PUMP	Spreed Tolerance cm3/1000 strokes : 3.5 Check tolerance cm3/1000S. : 6.0 CONTROL LEVER control lever position degree : 62.0 tolerance degree : + 4.0 control lever
WITH GOVERNOR	position degree : 111.0 tolerance degree : + 4.0
GUIDE SLEEVE TRAVEL	RATED SPEED
Rated speed rpm : 300 guide sleeve travel mm : 1.05 Tolerance mm : + 0.25	rack travel mm : 8.50 Rated speed rpm : 1465 Tolerance 1/min : + 5
Rated speed rpm : 1500 guide sleeve travel mm : 8.55 Tolerance mm : + 0.05	rack travel mm : 4.00 Rated speed rpm : 1550 Tolerance 1/min : + 15 rack travel mm : 0.50
Rated speed rpm : 500 guide sleeve travel mm : 2.55	Tolerance mm : + 0.50 Rated speed rpm : 1650
Tolerance mm : +- 0.25 Rated speed rpm : 750	LOW IDLE
guide sleeve travel mm : 4.20 Tolerance mm : + 0.10	control lever position degree : 67.0 tolerance degree : + 4.0
GUIDE SLEEVE POSITION	control lever position degree : 19.0
Rated speed rpm : 1500	tolerance degree : +- 4.0
Rack travel in mm: 16.50 + Tolerance mm: + 1.30 +	Testing:
FULL LOAD DELIVERY AT FULL LOAD STOP	Rated speed rpm : 300 rack travel mm : 7.00 Tolerance mm : + 0.10
Rated speed rpm : 1400	Rated speed rpm : 100
Aneroid pressure hPa : 700	CRT mm min. :> 8.00
Del. quantity cm3/1000 strokes: 78.5 Tolerance	Rated speed rpm : 485
cm3/1000 strokes : +- 1.0 +- Check tolerance	TORQUE CONTROL
cm3/1000s. : +- 3.0 +	· · · · · · · · · · · · · · · · · · ·

		•
Rated speed rpm	: 1400	→ Check tolerance
rack travel mm	9.55	+ cm3/1000s. : +- 4.0
Tolerance mm	: +- 0.05	1.00
10cci di lec ilali	5.05	Aneroid pressure
Dated around sam	. 900	+ hPa : 700
Rated speed rpm rack travel mm Tolerance mm	. 000	Rated speed rpm : 1000
rack travel mm	: 10.05	
Tolerance mm	: +- 0.05	+ Del. quantity
		+ cm3/1000 strokes : 79.0
Rated speed rpm	: 1000	+ Tolerance
rack travel mm Tolerance mm	; 9.80	+ cm3/1000 strokes : + 1.5
Tolerance mm	: +- 0.10	+ Check tolerance
		+ cm3/1000s. : +- 4.0
ANEROID/ALTITUDE		Aneroid pressure
		+ hPa : -
COMPENSATOR TEST		
		Rated speed rpm : 500
		+ Del. quantity
SETTING		+ cm3/1000 strokes : 42.0
		+ Tolerance
Rated speed rpm	: 500	+ cm3/1000 strokes : +- 1.0
Rated speed rpm Pressure hPa rack travel mm Tolerance mm	: 700	+ Check tolerance
rack travel mm	: 10.05	+ cm3/1000s. : + 3.0
Tolerance mm	· + 0.05	1
TO CET GITCE TIME	0.03	
MEASUREMENT		BREAKAWAY
MENOCKEMENT		T DREADAWA!
D	_	Ť
Pressure hPa	: -	†
Rated speed rpm	: 500	+ Rack travel in mm : 8.50
		+ Rated speed rpm : 1465
Rated speed rpm	: 500	+ Tolerance 1/min : + 5
		+
		Ţ.
Pressure hPa	: 170	+
Pressure hPa rack travel mm		
rack travel mm	: 0.55	STARTING FILE DELIVERY
	: 0.55	STARTING FUEL DELIVERY
rack travel mm Tolerance mm	: 0.55 : +- 0.05	+
rack travel mm Tolerance mm Pressure hPa	: 0.55 : + 0.05 : 330	+ Rated speed rpm : 100
rack travel mm Tolerance mm Pressure hPa rack travel mm	: 0.55 : + 0.05 : 330 : 1.20	Rated speed rpm : 100 rack travel mm : 13.00
rack travel mm Tolerance mm Pressure hPa	: 0.55 : + 0.05 : 330 : 1.20	Rated speed rpm : 100 rack travel mm : 13.00 Tolerance mm : + 0.10
rack travel mm Tolerance mm Pressure hPa rack travel mm	: 0.55 : + 0.05 : 330 : 1.20	Rated speed rpm : 100 rack travel mm : 13.00 Tolerance mm : + 0.10 Del. quantity
rack travel mm Tolerance mm Pressure hPa rack travel mm Tolerance mm	: 0.55 : + 0.05 : 330 : 1.20	Rated speed rpm : 100 rack travel mm : 13.00 Tolerance mm : + 0.10 Del. quantity cm3/1000 strokes : 80.0
rack travel mm Tolerance mm Pressure hPa rack travel mm	: 0.55 : + 0.05 : 330 : 1.20	Rated speed rpm : 100 rack travel mm : 13.00 Tolerance mm : + 0.10 Del. quantity cm3/1000 strokes : 80.0 Tolerance
rack travel mm Tolerance mm Pressure hPa rack travel mm Tolerance mm	: 0.55 : + 0.05 : 330 : 1.20 : + 0.10	Rated speed rpm : 100 rack travel mm : 13.00 Tolerance mm : + 0.10 Del. quantity cm3/1000 strokes : 80.0 Tolerance cm3/1000 strokes : + 10.0
rack travel mm Tolerance mm Pressure hPa rack travel mm Tolerance mm	: 0.55 : + 0.05 : 330 : 1.20 : + 0.10	Rated speed rpm : 100 rack travel mm : 13.00 Tolerance mm : + 0.10 Del. quantity cm3/1000 strokes : 80.0 Tolerance cm3/1000 strokes : + 10.0 Check tolerance
rack travel mm Tolerance mm Pressure hPa rack travel mm Tolerance mm START CUT-OUT Rated speed rpm	: 0.55 : + 0.05 : 330 : 1.20 : + 0.10	Rated speed rpm : 100 rack travel mm : 13.00 Tolerance mm : + 0.10 Del. quantity cm3/1000 strokes : 80.0 Tolerance cm3/1000 strokes : + 10.0
rack travel mm Tolerance mm Pressure hPa rack travel mm Tolerance mm	: 0.55 : + 0.05 : 330 : 1.20 : + 0.10	Rated speed rpm : 100 rack travel mm : 13.00 Tolerance mm : + 0.10 Del. quantity cm3/1000 strokes : 80.0 Tolerance cm3/1000 strokes : + 10.0 Check tolerance
rack travel mm Tolerance mm Pressure hPa rack travel mm Tolerance mm START CUT-OUT Rated speed rpm Rated speed rpm	: 0.55 : + 0.05 : 330 : 1.20 : + 0.10	Rated speed rpm : 100 rack travel mm : 13.00 Tolerance mm : + 0.10 Del. quantity cm3/1000 strokes : 80.0 Tolerance cm3/1000 strokes : + 10.0 Check tolerance
rack travel mm Tolerance mm Pressure hPa rack travel mm Tolerance mm START CUT-OUT Rated speed rpm Rated speed rpm Check	: 0.55 : + 0.05 : 330 : 1.20 : + 0.10 : > 100 : < 220	Rated speed rpm : 100 rack travel mm : 13.00 Tolerance mm : + 0.10 Del. quantity cm3/1000 strokes : 80.0 Tolerance cm3/1000 strokes : + 10.0 Check tolerance
rack travel mm Tolerance mm Pressure hPa rack travel mm Tolerance mm START CUT-OUT Rated speed rpm Rated speed rpm Check speed 1/min	: 0.55 : + 0.05 : 330 : 1.20 : + 0.10	Rated speed rpm : 100 rack travel mm : 13.00 Tolerance mm : + 0.10 Del. quantity cm3/1000 strokes : 80.0 Tolerance cm3/1000 strokes : + 10.0 Check tolerance
rack travel mm Tolerance mm Pressure hPa rack travel mm Tolerance mm START CUT-OUT Rated speed rpm Rated speed rpm Check speed 1/min Check	: 0.55 : + 0.05 : 330 : 1.20 : + 0.10 : > 220 : > 80	Rated speed rpm : 100 rack travel mm : 13.00 Tolerance mm : + 0.10 Del. quantity cm3/1000 strokes : 80.0 Tolerance cm3/1000 strokes : + 10.0 Check tolerance cm3/1000s. : + 13.0
rack travel mm Tolerance mm Pressure hPa rack travel mm Tolerance mm START CUT-OUT Rated speed rpm Rated speed rpm Check speed 1/min	: 0.55 : + 0.05 : 330 : 1.20 : + 0.10 : > 100 : < 220	Rated speed rpm : 100 rack travel mm : 13.00 Tolerance mm : + 0.10 Del. quantity cm3/1000 strokes : 80.0 Tolerance cm3/1000 strokes : + 10.0 Check tolerance
rack travel mm Tolerance mm Pressure hPa rack travel mm Tolerance mm START CUT-OUT Rated speed rpm Rated speed rpm Check speed 1/min Check	: 0.55 : + 0.05 : 330 : 1.20 : + 0.10 : > 220 : > 80	Rated speed rpm : 100 rack travel mm : 13.00 Tolerance mm : + 0.10 Del. quantity cm3/1000 strokes : 80.0 Tolerance cm3/1000 strokes : + 10.0 Check tolerance cm3/1000s. : + 13.0
rack travel mm Tolerance mm Pressure hPa rack travel mm Tolerance mm START CUT-OUT Rated speed rpm Rated speed rpm Check speed 1/min Check speed 1/min	: 0.55 : + 0.05 : 330 : 1.20 : + 0.10 : > 220 : > 80 : < 240	Rated speed rpm : 100 rack travel mm : 13.00 Tolerance mm : + 0.10 Del. quantity cm3/1000 strokes : 80.0 Tolerance cm3/1000 strokes : + 10.0 Check tolerance cm3/1000s. : + 13.0
rack travel mm Tolerance mm Pressure hPa rack travel mm Tolerance mm START CUT-OUT Rated speed rpm Rated speed rpm Check speed 1/min Check	: 0.55 : + 0.05 : 330 : 1.20 : + 0.10 : > 220 : > 80 : < 240	Rated speed rpm : 100 rack travel mm : 13.00 Tolerance mm : + 0.10 Del. quantity cm3/1000 strokes : 80.0 Tolerance cm3/1000 strokes : + 10.0 Check tolerance cm3/1000s. : + 13.0
rack travel mm Tolerance mm Pressure hPa rack travel mm Tolerance mm START CUT-OUT Rated speed rpm Rated speed rpm Check speed 1/min Check speed 1/min	: 0.55 : + 0.05 : 330 : 1.20 : + 0.10 : > 220 : > 80 : < 240	Rated speed rpm : 100 rack travel mm : 13.00 Tolerance mm : + 0.10 Del. quantity cm3/1000 strokes : 80.0 Tolerance cm3/1000 strokes : + 10.0 Check tolerance cm3/1000s. : + 13.0 LOW IDLE Del. quantity cm3/1000 strokes : 11.0 Tolerance
rack travel mm Tolerance mm Pressure hPa rack travel mm Tolerance mm START CUT-OUT Rated speed rpm Rated speed rpm Check speed 1/min Check speed 1/min FUEL DELIVERY CHA	: 0.55 : + 0.05 : 330 : 1.20 : + 0.10 : > 220 : > 80 : < 240	Rated speed rpm : 100 rack travel mm : 13.00 Tolerance mm : + 0.10 Del. quantity cm3/1000 strokes : 80.0 Tolerance cm3/1000 strokes : + 10.0 Check tolerance cm3/1000s. : + 13.0
rack travel mm Tolerance mm Pressure hPa rack travel mm Tolerance mm START CUT-OUT Rated speed rpm Rated speed rpm Check speed 1/min Check speed 1/min FUEL DELIVERY CHA	: 0.55 : + 0.05 : 330 : 1.20 : + 0.10 : > 220 : > 80 : < 240	Rated speed rpm : 100 rack travel mm : 13.00 Tolerance mm : + 0.10 Del. quantity cm3/1000 strokes : 80.0 Tolerance cm3/1000 strokes : + 10.0 Check tolerance cm3/1000s. : + 13.0 LOW IDLE Del. quantity cm3/1000 strokes : 11.0 Tolerance
rack travel mm Tolerance mm Pressure hPa rack travel mm Tolerance mm START CUT-OUT Rated speed rpm Rated speed rpm Check speed 1/min Check speed 1/min FUEL DELIVERY CHA Aneroid pressure hPa	: 0.55 : + 0.05 : 330 : 1.20 : + 0.10 : > 100 : < 220 : > 80 : < 240 RACTERISTICS : 700	Rated speed rpm : 100 rack travel mm : 13.00 Tolerance mm : + 0.10 Del. quantity cm3/1000 strokes : 80.0 Tolerance cm3/1000 strokes : + 10.0 Check tolerance cm3/1000s. : + 13.0 LOW IDLE Del. quantity cm3/1000 strokes : 11.0 Tolerance cm3/1000 strokes : + 3.0 Check tolerance
rack travel mm Tolerance mm Pressure hPa rack travel mm Tolerance mm START CUT-OUT Rated speed rpm Rated speed rpm Check speed 1/min Check speed 1/min FUEL DELIVERY CHA Aneroid pressure hPa Rated speed rpm	: 0.55 : + 0.05 : 330 : 1.20 : + 0.10 : > 100 : < 220 : > 80 : < 240 RACTERISTICS : 700	Rated speed rpm : 100 rack travel mm : 13.00 Tolerance mm : + 0.10 Del. quantity cm3/1000 strokes : 80.0 Tolerance cm3/1000 strokes : + 10.0 Check tolerance cm3/1000s. : + 13.0 LOW IDLE Del. quantity cm3/1000 strokes : 11.0 Tolerance cm3/1000 strokes : + 3.0 Check tolerance cm3/1000s. : + 5.0
rack travel mm Tolerance mm Pressure hPa rack travel mm Tolerance mm START CUT-OUT Rated speed rpm Rated speed rpm Check speed 1/min Check speed 1/min FUEL DELIVERY CHA Aneroid pressure hPa Rated speed rpm Del. quantity	: 0.55 : + 0.05 : 330 : 1.20 : + 0.10 : > 100 : < 220 : > 80 : < 240 RACTERISTICS : 700 : 800	Rated speed rpm : 100 rack travel mm : 13.00 Tolerance mm : + 0.10 Del. quantity cm3/1000 strokes : 80.0 Tolerance cm3/1000 strokes : + 10.0 Check tolerance cm3/1000s. : + 13.0 LOW IDLE Del. quantity cm3/1000 strokes : 11.0 Tolerance cm3/1000 strokes : + 3.0 Check tolerance cm3/1000s. : + 5.0 Spreed
rack travel mm Tolerance mm Pressure hPa rack travel mm Tolerance mm START CUT-OUT Rated speed rpm Rated speed rpm Check speed 1/min Check speed 1/min FUEL DELIVERY CHA Aneroid pressure hPa Rated speed rpm Del. quantity cm3/1000 strokes	: 0.55 : + 0.05 : 330 : 1.20 : + 0.10 : > 100 : < 220 : > 80 : < 240 RACTERISTICS : 700 : 800	Rated speed rpm : 100 rack travel mm : 13.00 Tolerance mm : + 0.10 Del. quantity cm3/1000 strokes : 80.0 Tolerance cm3/1000 strokes : + 10.0 Check tolerance cm3/1000s. : + 13.0 LOW IDLE Del. quantity cm3/1000 strokes : 11.0 Tolerance cm3/1000 strokes : + 3.0 Check tolerance cm3/1000s. : + 5.0 Spreed Tolerance
rack travel mm Tolerance mm Pressure hPa rack travel mm Tolerance mm START CUT-OUT Rated speed rpm Rated speed rpm Check speed 1/min Check speed 1/min FUEL DELIVERY CHA Aneroid pressure hPa Rated speed rpm Del. quantity cm3/1000 strokes Tolerance	: 0.55 : + 0.05 : 330 : 1.20 : + 0.10 : > 100 : < 220 : > 80 : < 240 RACTERISTICS : 700 : 800 : 75.5	Rated speed rpm : 100 rack travel mm : 13.00 Tolerance mm : + 0.10 Del. quantity cm3/1000 strokes : 80.0 Tolerance cm3/1000 strokes : + 10.0 Check tolerance cm3/1000s. : + 13.0 LOW IDLE Del. quantity cm3/1000 strokes : 11.0 Tolerance cm3/1000 strokes : + 3.0 Check tolerance cm3/1000s. : + 5.0 Spreed
rack travel mm Tolerance mm Pressure hPa rack travel mm Tolerance mm START CUT-OUT Rated speed rpm Rated speed rpm Check speed 1/min Check speed 1/min FUEL DELIVERY CHA Aneroid pressure hPa Rated speed rpm Del. quantity cm3/1000 strokes	: 0.55 : + 0.05 : 330 : 1.20 : + 0.10 : > 100 : < 220 : > 80 : < 240 RACTERISTICS : 700 : 800 : 75.5	Rated speed rpm : 100 rack travel mm : 13.00 Tolerance mm : + 0.10 Del. quantity cm3/1000 strokes : 80.0 Tolerance cm3/1000 strokes : + 10.0 Check tolerance cm3/1000s. : + 13.0 LOW IDLE Del. quantity cm3/1000 strokes : 11.0 Tolerance cm3/1000 strokes : + 3.0 Check tolerance cm3/1000s. : + 5.0 Spreed Tolerance

cm3/1000s.	:	5.5	

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

Edition : 26.02.96 Test oil : ISO 4113

Combination No. : 9 400 085 363

Injection pump

Pump designation : PES6A95D41ORS2772 EP type number : 9 400 084 018

Governor

Governer design. : RQV300...1300AB1277L

Governer no. : 9 420 080 355

Cust. part No. :

Customer-spec. information Customer : MBB : OM 366 A Motor Power KW : 125.0

TEST BENCH REQUIREMENTS

Inlet line : 3.2

Test oil inlet

temp. °C 40 Tolerance °C

Overflow valve : 1 419 992 198

Inlet press. bar : 1.5

Test nozzle holde

: 0 681 343 009 assembly

Opening pressure

173.5 : +- 1.5 Tolerance bar

Test lines : 1 680 750 015

Outside diameter : 6.0

x inside diameter : 3.0 x length mm : 600

REMARKS

(A) INJECTION PUMP SETTING VALUES Set equal delivery quant.

per values ____

BEGINNING OF DELIVERY

Test pressure bar : 26.0 Tolerance bar : + 1.0

Prestroke mm : 3.25 : + 0.05 Tolerance mm Check : +- 0.10 tolerance mm

Rack travel in mm: 10.50 Tolerance mm : + 1.50

: 1-5-3-6-2-Firing order : 4

: 0-60-120-180-240 Phasing

: -300

BASIC SETTING

1300 Rated speed rpm :

Rack travel in mm: 10.55 Tolerance mm : +- 0.05

Del. quantity cm3/1000 strokes : 91.0

Tolerance

cm3/1000 strokes : +- 1.0

Check tolerance cm3/1000s.

: +- 3.0

Spreed Tolerance

cm3/1000 strokes :

3.5

Check tolerance cm3/1000s.

8.0

-L	- Spreed
Del. quantity	- Tolerance
cm3/1000 strokes : 11.0	cm3/1000 strokes : 3.5
Tolerance	Check tolerance
cm3/1000 strokes : +- 2.0	- cm3/1000s. : 8.0
Check tolerance	
cm3/1000s. : + 4.5	
	·
Spreed	CONTROL 1 FUED
Tolerance + cm3/1000 strokes : 5.5	CONTROL LEVER
Check tolerance	control lever
cm3/1000s. : 9.0 +	position degree : 108.0
†	tolerance degree : +- 4.0
(m) APPERLIA AP TALIFATTAN NIGHT	DATES OBEES
(B) SETTING OF INJECTION PUMP	RATED SPEED
WITH GOVERNOR +	
†	rack travel mm : 9.50
	Rated speed rpm : 1350
GUIDE SLEEVE TRAVEL	Tolerance 1/min : + 5
+	
Rated speed rpm : 300 +	rack travel mm : 4.00
guide steeve	Rated speed rpm : 1475
travel mm : 1.05 +	Tolerance 1/min : + 15
Tolerance mm : + 0.25 +	
+	rack travel mm : 0.50
Rated speed rpm : 1500	Tolerance mm : + 0.50
guide sleeve	Rated speed rpm : 1650
travel mm : 8.55	
Tolerance mm : + 0.05	
1	
Rated speed rpm : 500	LOW IDLE
guide sleeve	
travel mm : 2.55	
Tolerance mm : + 0.25	control lever
1 occi arioc inni	position degree : 68.0
Rated speed rpm : 750	tolerance degree : + 4.0
autide cleeve	tote: affect degree 4.0
guide sleeve	_
travel mm : 4.20	Testing:
	Testing:
travel mm : 4.20	Testing: Rated speed rpm : 300
travel mm : 4.20 Tolerance mm : + 0.10	Testing: Rated speed rpm : 300
travel mm : 4.20	Testing:
Travel mm : 4.20 Tolerance mm : + 0.10 GUIDE SLEEVE POSITION	Testing: Rated speed rpm : 300 rack travel mm : 7.00 Tolerance mm : +- 0.10
travel mm : 4.20 Tolerance mm : + 0.10	Testing: Rated speed rpm : 300
Tolerance mm : 4.20 Tolerance mm : + 0.10 GUIDE SLEEVE POSITION Rated speed rpm : 1500	Testing: Rated speed rpm : 300 rack travel mm : 7.00 Tolerance mm : + 0.10 Rated speed rpm : 100
Tolerance mm : 4.20 Tolerance mm : + 0.10 GUIDE SLEEVE POSITION Rated speed rpm : 1500 Rack travel in mm : 16.50	Testing: Rated speed rpm : 300 rack travel mm : 7.00 Tolerance mm : +- 0.10
Tolerance mm : 4.20 Tolerance mm : + 0.10 GUIDE SLEEVE POSITION Rated speed rpm : 1500	Testing: Rated speed rpm : 300 rack travel mm : 7.00 Tolerance mm : + 0.10 Rated speed rpm : 100 CRT mm min. : > 8.00
Tolerance mm : 4.20 Tolerance mm : + 0.10 GUIDE SLEEVE POSITION Rated speed rpm : 1500 Rack travel in mm : 16.50	Testing: Rated speed rpm : 300 rack travel mm : 7.00 Tolerance mm : + 0.10 Rated speed rpm : 100
Travel mm : 4.20 Tolerance mm : + 0.10 GUIDE SLEEVE POSITION Rated speed rpm : 1500 Rack travel in mm : 16.50 Tolerance mm : + 1.30	Testing: Rated speed rpm : 300 rack travel mm : 7.00 Tolerance mm : + 0.10 Rated speed rpm : 100 CRT mm min. : > 8.00
Tolerance mm : 4.20 Tolerance mm : + 0.10 GUIDE SLEEVE POSITION Rated speed rpm : 1500 Rack travel in mm : 16.50	Testing: Rated speed rpm : 300 rack travel mm : 7.00 Tolerance mm : + 0.10 Rated speed rpm : 100 CRT mm min. :> 8.00 Rated speed rpm : 325
Travel mm : 4.20 Tolerance mm : + 0.10 GUIDE SLEEVE POSITION Rated speed rpm : 1500 Rack travel in mm : 16.50 Tolerance mm : + 1.30 FULL LOAD DELIVERY AT FULL LOAD STOP	Testing: Rated speed rpm : 300 rack travel mm : 7.00 Tolerance mm : + 0.10 Rated speed rpm : 100 CRT mm min. : > 8.00
Travel mm : 4.20 Tolerance mm : + 0.10 GUIDE SLEEVE POSITION Rated speed rpm : 1500 Rack travel in mm : 16.50 Tolerance mm : + 1.30 FULL LOAD DELIVERY AT FULL LOAD STOP Rated speed rpm : 1300	Testing: Rated speed rpm : 300 rack travel mm : 7.00 Tolerance mm : + 0.10 Rated speed rpm : 100 CRT mm min. :> 8.00 Rated speed rpm : 325 TORQUE CONTROL
Travel mm : 4.20 Tolerance mm : + 0.10 GUIDE SLEEVE POSITION Rated speed rpm : 1500 Rack travel in mm : 16.50 Tolerance mm : + 1.30 FULL LOAD DELIVERY AT FULL LOAD STOP Rated speed rpm : 1300 Aneroid pressure	Testing: Rated speed rpm : 300 rack travel mm : 7.00 Tolerance mm : + 0.10 Rated speed rpm : 100 CRT mm min. :> 8.00 Rated speed rpm : 325 TORQUE CONTROL Rated speed rpm : 1300
Travel mm : 4.20 Tolerance mm : + 0.10 GUIDE SLEEVE POSITION Rated speed rpm : 1500 Rack travel in mm : 16.50 Tolerance mm : + 1.30 FULL LOAD DELIVERY AT FULL LOAD STOP Rated speed rpm : 1300	Testing: Rated speed rpm : 300 rack travel mm : 7.00 Tolerance mm : + 0.10 Rated speed rpm : 100 CRT mm min. :> 8.00 Rated speed rpm : 325 TORQUE CONTROL Rated speed rpm : 1300 rack travel mm : 10.55
Travel mm : 4.20 Tolerance mm : + 0.10 GUIDE SLEEVE POSITION Rated speed rpm : 1500 Rack travel in mm : 16.50 Tolerance mm : + 1.30 FULL LOAD DELIVERY AT FULL LOAD STOP Rated speed rpm : 1300 Aneroid pressure hPa : 800 Del. quantity	Testing: Rated speed rpm : 300 rack travel mm : 7.00 Tolerance mm : + 0.10 Rated speed rpm : 100 CRT mm min. :> 8.00 Rated speed rpm : 325 TORQUE CONTROL Rated speed rpm : 1300
Travel mm : 4.20 Tolerance mm : + 0.10 GUIDE SLEEVE POSITION Rated speed rpm : 1500 Rack travel in mm : 16.50 Tolerance mm : + 1.30 FULL LOAD DELIVERY AT FULL LOAD STOP Rated speed rpm : 1300 Aneroid pressure hPa : 800	Testing: Rated speed rpm : 300 rack travel mm : 7.00 Tolerance mm : + 0.10 Rated speed rpm : 100 CRT mm min. :> 8.00 Rated speed rpm : 325 TORQUE CONTROL Rated speed rpm : 1300 rack travel mm : 10.55 Tolerance mm : + 0.05
Travel mm : 4.20 Tolerance mm : + 0.10 GUIDE SLEEVE POSITION Rated speed rpm : 1500 Rack travel in mm : 16.50 Tolerance mm : + 1.30 FULL LOAD DELIVERY AT FULL LOAD STOP Rated speed rpm : 1300 Aneroid pressure hPa : 800 Del. quantity	Testing: Rated speed rpm : 300 rack travel mm : 7.00 Tolerance mm : + 0.10 Rated speed rpm : 100 CRT mm min. :> 8.00 Rated speed rpm : 325 TORQUE CONTROL Rated speed rpm : 1300 rack travel mm : 10.55 Tolerance mm : + 0.05
Travel mm : 4.20 Tolerance mm : + 0.10 GUIDE SLEEVE POSITION Rated speed rpm : 1500 Rack travel in mm : 16.50 Tolerance mm : + 1.30 FULL LOAD DELIVERY AT FULL LOAD STOP Rated speed rpm : 1300 Aneroid pressure hPa : 800 Del. quantity cm3/1000 strokes : 91.0 Tolerance	Testing: Rated speed rpm : 300 rack travel mm : 7.00 Tolerance mm : + 0.10 Rated speed rpm : 100 CRT mm min. :> 8.00 Rated speed rpm : 325 TORQUE CONTROL Rated speed rpm : 1300 rack travel mm : 10.55 Tolerance mm : + 0.05
Travel mm : 4.20 Tolerance mm : + 0.10 GUIDE SLEEVE POSITION Rated speed rpm : 1500 Rack travel in mm : 16.50 Tolerance mm : + 1.30 FULL LOAD DELIVERY AT FULL LOAD STOP Rated speed rpm : 1300 Aneroid pressure hPa : 800 Del. quantity cm3/1000 strokes : 91.0 Tolerance cm3/1000 strokes : + 1.0	Testing: Rated speed rpm : 300 rack travel mm : 7.00 Tolerance mm : + 0.10 Rated speed rpm : 100 CRT mm min. :> 8.00 Rated speed rpm : 325 TORQUE CONTROL Rated speed rpm : 1300 rack travel mm : 10.55 Tolerance mm : + 0.05
Travel mm : 4.20 Tolerance mm : + 0.10 GUIDE SLEEVE POSITION Rated speed rpm : 1500 Rack travel in mm : 16.50 Tolerance mm : + 1.30 FULL LOAD DELIVERY AT FULL LOAD STOP Rated speed rpm : 1300 Aneroid pressure hPa : 800 Del. quantity cm3/1000 strokes : 91.0 Tolerance	Testing: Rated speed rpm : 300 rack travel mm : 7.00 Tolerance mm : + 0.10 Rated speed rpm : 100 CRT mm min. :> 8.00 Rated speed rpm : 325 TORQUE CONTROL Rated speed rpm : 1300 rack travel mm : 10.55

Rated speed rpm rack travel mm Tolerance mm	: 1000 : 11.00 : + 0.10	+ Tolerance + cm3/1000 strokes : +- 2.0 + Check tolerance + cm3/1000s. : +- 4.0
ANEROID/ALTITUDE COMPENSATOR TEST		Aneroid pressure hPa : - Rated speed rpm : 500
SETTING		+ Del. quantity + cm3/1000 strokes : 62.0 + Tolerance
Rated speed rpm Pressure hPa rack travel mm Tolerance mm	: 800	cm3/1000 strokes : +- 1.0 Check tolerance cm3/1000s. : +- 3.0
MEASUREMENT		BREAKAWAY
Pressure hPa Rated speed rpm Rated speed rpm		Rack travel in mm : 9.50 Rated speed rpm : 1350 Tolerance 1/min : +- 5
Pressure hPa rack travel mm Tolerance mm	: 1.20	STARTING FUEL DELIVERY
Fressure hPa rack travel mm Tolerance mm	: 310 : 0.45	Rated speed rpm : 100 rack travel mm : 13.30 Tolerance mm : +- 0.10 Del. quantity
START CUT-DUT		
Rated speed rpm Rated speed rpm	: > 100 : < 220	Check tolerance cm3/1000s. : +- 10.0
Check speed 1/min Check	: > 80	
speed 1/min	: < 240	LOW IDLE
FUEL DELIVERY CHA	ARACTERISTICS	Del. quantity cm3/1000 strokes : 11.0 Tolerance
Aneroid pressure hPa Rated speed rpm Del. quantity	: 800 : 800	+ cm3/1000 strokes : +- 2.0 + Check tolerance + cm3/1000s. : +- 4.5 + Spreed
cm3/1000 strokes Tolerance		Tolerance cm3/1000 strokes : 5.5
cm3/1000 strokes Check tolerance cm3/1000s.	: +- 2.0 : +- 4.0	+ Check tolerance + cm3/1000s. : 9.0
Aneroid pressure hPa Rated speed rpm Del. quantity cm3/1000 strokes		<u></u>

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

Edition : 12.03.96 Test oil : ISO 4113

Combination No. : 9 400 085 377

Injection pump

Pump designation : PES6A950410RS2857 EP type number : 9 400 084 036

Governor

Governer design. : RQV300...1250AB1284L Governer no. : 9 420 080 372

Cust. part No.

Customer-spec. information

Customer : DEUTZ-ARGENTINA : BF 6 L 913C : 140.0 Motor

Power KW

TEST BENCH REQUIREMENTS

Inlet line : 3.2

Test oil inlet

temp. °C Tolerance °C 2.0

Overflow valve : 1 419 992 198

Inlet press. bar : 1.5

Test nozzle holde

: 0 681 343 009 assembly

Opening pressure

173.5 Tolerance bar

Test lines : 1 680 750 014

Outside diameter : 6.0

x inside diameter: 2.0 x length mm : 600

REMARKS

(A) INJECTION PUMP SETTING VALUES Set equal delivery quant.

per values _____

BEGINNING OF DELIVERY

Test pressure bar: 26.0 Tolerance bar : + 1.0

Prestroke mm : + - 0.05Tolerance mm Check

tolerance mm : + - 0.10

Rack travel in mm: 10.50 Tolerance mm : + 1.50

: 1-5-3-6-2-Firing order

: 0-60-120-180-240 Phasing

: -300

BASIC SETTING

Rated speed rpm : 1250

Rack travel in mm: 11.25 Tolerance mm : +- 0.05

Del. quantity cm3/1000 strokes : 98.5

Tolerance

cm3/1000 strokes : +- 1.0

Check tolerance cm3/1000s. 3.0

Spreed

Tolerance

cm3/1000 strokes : 3.5

Check tolerance cm3/1000s.

8.0

	+	Del. quantity
Del. quantity	1	cm3/1000 strokes : 98.5
cm3/1000 strokes	: 17.0	Tolerance
Tolerance	+	cm3/1000 strokes : +- 1.0
cm3/1000 strokes	: + 2.0 +	Check tolerance
Check tolerance cm3/1000s.	: +- 4.5	cm3/1000s. : +- 3.0
Spreed	· + 4.5	Spreed Tolerance
Tolerance	Ţ	cm3/1000 strokes : 3.5
cm3/1000 strokes	: 5.5	Check tolerance
Check tolerance	+	cm3/1000s. : 8.0
cm3/1000s.	: 9.0	
	†	
(B) SETTING OF IN	NIECTION DIMP	CONTROL LEVER
WITH GOVERNOR	405011014 10141	CONTINUE EFACIA
WETTI GOTELLION	1	control lever
	+	position degree : 120.0
GUIDE SLEEVE TRAN	VEL +	tolerance degree : +- 4.0
Dakad and allows	1250	DATES OFFE
Rated speed rpm	: 1250	RATED SPEED
guide sleeve travel mm	: 7.70	rack travel mm : 10.20
Tolerance mm	: + 0.10 I	Rated speed rpm : 1295
	+	Tolerance 1/min : + 5
Rated speed rpm	: 900	
guide sleeve	+	rack travel mm : 4.00
travel mm	5.35	Rated speed rpm : 1400 Tolerance 1/min : +- 15
Tolerance mm	: ← 0.25	Tolerance 1/min : +- 15
Rated speed rpm	: 300	rack travel mm : 0.50
guide sleeve	+	Tolerance mm : + 0.50
travel mm	: 0.85	Rated speed rpm : 1550
Tolerance mm	: + 0.25 +	
0.4	500	
Rated speed rpm	: 500 +	LOW IDLE
guide sleeve travel mm	: 3.55	LOW IDEE
Tolerance mm	: + 0.25	
	+	control lever
Rated speed rpm	: 1400 +	position degree : 66.0
guide sleeve	1	tolerance degree : +- 4.0
travel mm Tolerance mm	: 9.05 + : + 0.25 +	Testing:
roterance mm	: - 0.23	resemy.
		Rated speed rpm : 300
GUIDE SLEEVE POSI	TION +	rack travel mm : 5.00 Tolerance mm : +- 0.10
	+	Tolerance mm : +- 0.10
Rated speed rpm	: 1350 +	Data dament non a 100
Dool Assessed die me	14 50	Rated speed rpm : 100
Rack travel in mm Tolerance mm		CRT mm min. :> 7.00
TOTE GITCE UNIT	1.30	OICI (IRII IIII)
		Rated speed rpm : 375
FULL LOAD DELIVER	Y AT FULL LOAD STOP	
	1250	TOPOUT CONTROL
Rated speed rpm		TORQUE CONTROL
Aneroid pressure hPa	: 900	Rated speed rpm : 1250
HEQ	· , , , ,	rack travel mm : 11.25
	1	

Tolerance mm	: +- 0.05 : 800	Del. quantity cm3/1000 strokes : 83.5 Tolerance
rack travel mm Tolerance mm		- cm3/1000 strokes : +- 1.0 Check tolerance cm3/1000s. : +- 3.0
ANEROID/ALTITUDE COMPENSATOR TEST		BREAKAWAY
SETTING		Rack travel in mm: 10.20 Rated speed rpm: 1295
Rated speed rpm Pressure hPa rack travel mm Tolerance mm	: 500 : 900 : 11.25 : +- 0.05	Tolerance 1/min : + 5
MEASUREMENT		STARTING FUEL DELIVERY
Pressure hPa Rated speed rpm	500	Rated speed rpm : 100 rack travel mm : 16.10 Tolerance mm : + 0.10 Del. quantity
Rated speed rpm	: 500	cm3/1000 strokes : 160.0
Pressure hPa rack travel mm Tolerance mm	: 670 : 1.60 : + 0.10	cm3/1000 strokes : + 7.5 Check tolerance cm3/1000s. : + 10.0
Pressure hPa rack travel mm Tolerance mm	: 550 : 0.45 : ← 0.05	LOW IDLE
START CUT-OUT		Del. quantity
Rated speed rpm Rated speed rpm	: > 100 : < 220	cm3/1000 strokes : 17.0 Tolerance cm3/1000 strokes : + 2.0 Check tolerance
Check speed 1/min Check	: > 80	- cm3/1000s. : + 4.5 - Spreed - Tolerance
speed 1/min	: < 240	cm3/1000 strokes : 5.5 Check tolerance
FUEL DELIVERY CHA	RACTERISTICS	+ cm3/1000s. : 9.0
Aneroid pressure hPa Rated speed rpm	: 900 : 800	<u> </u>
Del. quantity cm3/1000 strokes	: 104.0	End of test specification sheet
Tolerance cm3/1000 strokes Check tolerance cm3/1000s.	: +- 2.0 : +- 4.0	† †
Aneroid pressure hPa Rated speed rpm	: - : 500	+

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

: 11.03.96 Edition : ISO 4113 Test oil

Combination No. : 0 400 863 008

Injection pump

Pump designation : PES3A90D320/3RS2658 EP type number : 0 410 893 004

Governor

Governer design. : RSV325...1500A2C505

: -3R

Governer no. : 0 420 233 229

Cust. part No. : 1-7545

Customer-spec. information : MWM Customer Motor : D226B-3

: 49.5 Power KW

TEST BENCH REQUIREMENTS

Inlet line : 3.1

Test oil inlet

temp. °C Tolerance °C

Overflow valve : 1 419 992 198

1.5 Inlet press. bar :

Test nozzle holde

: 0 681 343 009 assembly

Opening pressure

173.5 bar 1.5 Tolerance bar

Test lines : 1 680 750 014

Outside diameter : 6.0

x inside diameter : 2.0 x length mm

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant. per values _____

BEGINNING OF DELIVERY

Test pressure bar : 26.0 Tolerance bar : + 1.0

Prestroke mm 3.00 Tolerance mm : +- 0.05

Check

: + - 0.10tolerance mm

Rack travel in mm: 10.50 : +- 1.50 Tolerance mm

Firing order : 1- 2- 3

Phasing : 0-120-240

Beginning of delivery differende

and maximum rack

9.00 travel Difference ° CS 4.00

BASIC SETTING

1100 Rated speed rpm

Rack travel in mm : 11.25 : + 0.05Tolerance mm

Del. quantity cm3/1000 strokes : 90.0

Tolerance cm3/1000 strokes : +-0.5

Check tolerance

cm3/1000s. : +-2.5

Spreed +	
Tolerance cm3/1000 strokes : 3.0	CONTROL LEVER
Check tolerance cm3/1000s. : 5.0	control lever position degree : 93.0 tolerance degree : +- 4.0
Rated speed rpm : 325	-
Rack travel in mm: 9.80	RATED SPEED
Tolerance mm : + 0.10 + Del. quantity +	rack travel mm : 10.20 Rated speed rpm : 1145
cm3/1000 strokes : 49.5	Tolerance 1/min : - 5
Tolerance cm3/1000 strokes : +- 3.0	rack travel mm : 4.00
Check tolerance cm3/1000s. : + 5.0	Rated speed rpm : 1195 Tolerance 1/min : +- 15
Spreed +	rack travel mm : 0.85
cm3/1000 strokes : 2.5	Tolerance mm : +- 0.55 Rated speed rpm : 1375
cm3/1000s. : 4.5	rack travel mm : 4.00
(D) SETTING OF TAMESTON DUMP	Rated speed rpm : 1225
(B) SETTING OF INJECTION PUMP WITH GOVERNOR	
†	LOW IDLE
GUIDE SLEEVE POSITION	
Rated speed rpm : 800	control lever position degree : 67.0 tolerance degree : + 4.0
Rack travel in mm : 0.50 + Tolerance mm : + 0.20 +	Setting point w/out bumper spring
governor spring + pre-tension +	Rated speed rpm : 325 rack travel mm : 9.30
click setting x : 2.50	Testing:
FULL LOAD DELTUEDY AT FULL LOAD STOD	-
FULL LOAD DELIVERY AT FULL LOAD STOP	Rated speed rpm : 325 rack travel mm : 9.80
Rated speed rpm : 1100 +	Tolerance mm : + 0.10
hPa : - + Del. quantity +	rack travel mm : 2.00 Rated speed rpm : 510
cm3/1000 strokes : 90.0	Tolerance 1/min : + 30
cm3/1000 strokes : + 0.5 + Check tolerance	TORQUE CONTROL
cm3/1000s. : +- 2.5 +	
Spreed + Tolerance +	Rated speed rpm : 1100 rack travel mm : 11.25
cm3/1000 strokes : 3.0 +	Tolerance mm : + 0.05
cm3/1000s. : 5.0	Rated speed rpm : 500 rack travel mm : 11.30 Tolerance mm : + 0.10

BREAKAWAY

Rack travel in mm : 10.20
Rated speed rpm : 1145
Tolerance 1/min : +- 5

STARTING FUEL DELIVERY

Rated speed rpm : 100 rack travel mm : 18.90 Tolerance mm : +- 2.10 Del. quantity cm3/1000 strokes : 115.0

LOW IDLE

Rated speed rpm 325 9.80 rack travel mm +- 0.10 Tolerance mm Del. quantity cm3/1000 strokes : 49.5 Tolerance cm3/1000 strokes : +-3.0 Check tolerance cm3/1000s. 5.0 Spreed Tolerance 2.5 cm3/1000 strokes : Check tolerance cm3/1000s. 4.5

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

Edition : 07.03.96 : ISO 4113 Test oil

Combination No. : 0 402 066 710

Injection pump

Pump designation : PES6P110A120RS3357 EP type number : 0 412 106 754

Governor

Governer design. : RSV400...900P4A633

Governer no. : 0 421 833 541

Cust. part No. : 3931255

Customer-spec. information

Customer : CDC

: 6CTA ELITE Motor Power KW : 207.0

TEST BENCH REQUIREMENTS

Inlet line : 3.2

Test oil inlet

Tolerance °C temp. °C 40 : +- 2.0

Overflow valve : 2 417 413 086

Inlet press. bar : 2.0 Tolerance bar : + 0.1

Test nozzle holde

: 1 688 901 103 assembly

Opening pressure

208.5 bar • Tolerance bar $: \leftarrow 1.5$

Test Lines : 1 680 750 089

Outside diameter : 8.0

x inside diameter: 3.0 600 x Length mm :

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant.

per values _____

BEGINNING OF DELIVERY

Test pressure bar: 17.0 Tolerance bar : + 1.0

Prestroke mm : 3.60
Tolerance mm : + 0.05 Check

tolerance mm : \leftarrow 0.10

Rack travel in mm: 10.50 Tolerance mm : + 1.50

Firing order : 1-5-3-6-2-

Phasing : 0-60-120-180-240

: -300

Tolerance : +- 0.30

Check

: +- 0.50 tolerance *NW

Start of delivery blocking

°NW after s.o.d.: 7.75 Tolerance : + 0.50

Check

tolerance *NW : + 0.75

Barrel no. : 1

BASIC SETTING

Rated speed rpm : 850

Rack travel in mm: 13.35 Tolerance mm : + 0.05

Del. quantity cm3/1000 strokes : 216.0	Check tolerance cm3/1000s. : 7.5
cm3/1000 strokes : +- 1.0	CONTROL LEVER
Check tolerance cm3/1000s. : +- 3.0	control lever position degree : 102.0
Spreed Tolerance cm3/1000 strokes : 4.0	RATED SPEED
Check tolerance cm3/1000s. : 7.5	rack travel mm : 12.30 Rated speed rpm : 930 Tolerance 1/min : +- 5
Del. quantity cm3/1000 strokes : 24.0	rack travel mm : 4.00 Rated speed rpm : 985 Tolerance 1/min : +- 5
cm3/1000 strokes : + 2.0 + Check tolerance	rack travel mm : 0.85
cm3/1000s. : +- 4.5 Spreed Tolerance	Tolerance mm : +- 0.55 Rated speed rpm : 1100
cm3/1000 strokes : 6.0 + Check tolerance +	rack travel mm : 4.00 Rated speed rpm : 995
cm3/1000s. : 9.0	
(B) SETTING OF INJECTION PUMP WITH GOVERNOR	LOW IDLE
<u> </u>	control lever position degree : 77.0
GUIDE SLEEVE POSITION	Setting point w/out bumper spring
Rated speed rpm : 800	Rated speed rpm : 400
Rack travel in mm : 0.50 Tolerance mm : +- 0.20	rack travel mm : 5.70
governor spring	Testing:
pre-tension + click setting x : 4.50	Rated speed rpm : 400 rack travel mm : 6.20
Territ setting x . 4.50	Tolerance mm : + 0.20
FULL LOAD DELIVERY AT FULL LOAD STOP	rack travel mm : 2.00 Rated speed rpm : 500
Rated speed rpm : 850 Aneroid pressure	Tolerance 1/min : +- 30
hPa : - + Del. quantity +	Rated speed rpm : 100
cm3/1000 strokes : 216.0 + Tolerance	CRT mm min. : < 19.00
cm3/1000 strokes : + 1.0 +	
Check tolerance	TORQUE CONTROL
	TORQUE CONTROL Rated speed rpm : 850 rack travel mm : 13.35

BREAKAWAY

Rack travel in mm: 12.30
Rated speed rpm: 930
Tolerance 1/min: +- 5

STARTING FUEL DELIVERY

Rated speed rpm : 100
rack travel mm : 21.00
Tolerance mm : + 0.50
Del. quantity
cm3/1000 strokes : 165.0
Tolerance
cm3/1000 strokes : + 20.0
Check tolerance
cm3/1000s. : + 25.0

LOW IDLE

Del. quantity
cm3/1000 strokes : 24.0
Tolerance
cm3/1000 strokes : + 2.0
Check tolerance
cm3/1000s. : + 4.5
Spreed
Tolerance
cm3/1000 strokes : 6.0
Check tolerance
cm3/1000s. : 9.0

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

: 08.03.96 Edition : ISO 4113 Test oil

Combination No. : 0 402 076 778

Injection pump

Pump designation : PES6P120A720RS3352 EP type number : 0 412 026 780

Governor

Governer design. : RSV400...1100P2A599

: -1

: 0 421 833 486 Governer no.

Cust. part No. : RE62642

Customer-spec. information Customer : DEERE

: 6081AF001 Motor Power KW : 187.0

TEST BENCH REQUIREMENTS

Inlet line : 4.2

Test oil inlet

temp. °C Tolerance °C

Overflow valve : 1 457 413 010

Inlet press. bar : 2.0

Test nozzle holde

: 1 688 901 101 assembly

Opening pressure

208.5 bar 1.5 Tolerance bar

Test Lines : 1 680 750 015

Outside diameter : 6.0

x inside diameter: 3.0 x length mm : 600

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant.

per values ____

BEGINNING OF DELIVERY

Test pressure bar: 17.0 Tolerance bar : + 1.0

Prestroke mm 3.60 : + 0.05 Tolerance mm

Check

tolerance mm : + 0.10

Rack travel in mm: 10.50 Tolerance mm : +- 1.50

Firing order : 1-5-3-6-2-

: 4

Phasing : 0-60-120-180-240

: -300

: +- 0.75

Tolerance : +- 0.30 Check

tolerance °NW

Start of delivery mark

*NW after s.o.d. : 8.00 Tolerance : + 0.50

Check

tolerance °NW : +- 0.75

1 Barrel no. :

Beginning of delivery differende

and maximum rack

14.00 travel Difference * CS : 2.50

BASIC SETTING

Rated speed rpm : 1100

+	theck tolerance
Rack travel in mm: 12.45	cm3/1000s. : +- 3.0
Tolerance mm : +- 0.05	Spreed Tolerance
	cm3/1000 strokes : 4.0
Del. quantity	Check tolerance
cm3/1000 strokes : 161.0	cm3/1000s. : 6.5
Tolerance	
cm3/1000 strokes : +- 1.0 +	
Charles to the large of the charles to the charles	CONTROL LEVER
Check tolerance + 3.0 +	control lever
	position degree : 97.0
Spreed	tolerance degree : +- 4.0
Tolerance + cm3/1000 strokes : 4.0 +	RATED SPEED
Chist toos strokes : 4.0	RATED SPEED
Check tolerance	rack travel mm : 11.45
cm3/1000s. : 6.5	Rated speed rpm : 1145
Del. quantity	Tolerance 1/min : +- 5
cm3/1000 strokes : 24.5	rack travel mm : 4.00
Tolerance	Rated speed rpm : 1205
cm3/1000 strokes : + 2.0 +	Tolerance 1/min : + 5
Check tolerance + 4.5 + 4.5	rack travel mm : 0.85
Spreed	Tolerance mm : +- 0.55
Tolerance +	Rated speed rpm : 1350
cm3/1000 strokes : 6.0 +	
Check tolerance + cm3/1000s. : 8.0	rack travel mm : 4.00 Rated speed rpm : 1215
Chis/ 10005.	hated speed (bill : 121)
t	
(B) SETTING OF INJECTION PUMP WITH GOVERNOR	LOW IDLE
WITH GOVERNOR	FOM INCE
+	
GUIDE SLEEVE POSITION	control lever position degree : 73.0
GOIDE SCEEVE POSITION	position degree : 73.0 tolerance degree : +- 4.0
Rated speed rpm : 800	
Paul during in man a 0 50	Setting point w/out bumper spring
Rack travel in mm: 0.50 † Tolerance mm: + 0.20 †	Rated speed rpm : 400
Total dive time	rack travel mm : 5.20
governor spring +	
pre-tension + click setting x : 4.25 +	Testing:
trick secting x . 4.25	Rated speed rpm : 400
	rack travel mm : 5.70
FULL LOAD DELIVERY AT FULL LOAD STOP	Toleranse mm : + 0.10
Rated speed rpm : 1100	Rated speed rpm : 100
Aneroid pressure	
hPa : 1600 +	CRT mm min. : > 19.00
Del. quantity	
cm3/1000 strokes : 161.0	TORQUE CONTROL
cm3/1000 strokes : + 1.0	recorded very recom
•	

Rated speed rpm rack travel mm Tolerance mm Rated speed rpm rack travel mm Tolerance mm	: 12.45 : + 0.05 : 700 : 12.80	Del. quantity cm3/1000 strokes : 71.0 Tolerance cm3/1000 strokes : + 2.0 Check tolerance cm3/1000s. : + 4.0
ANEROID/ALTITUDE COMPENSATOR TEST		Rack travel in mm: 11.45 Rated speed rpm: 1145 Tolerance 1/min: + 5
Rated speed rpm Pressure hPa	: 500 : 1600	STARTING FUEL DELIVERY
MEASUREMENT Pressure hPa Rated speed rpm rack travel mm Tolerance mm Rated speed rpm Pressure hPa rack travel mm Tolerance mm	500 8.80 - 0.20 500 960 11.70 - 0.20	Rated speed rpm : 100 rack travel mm : 21.00 Tolerance mm : + 0.50 Del. quantity cm3/1000 strokes : 105.0 Tolerance cm3/1000 strokes : + 20.0 Check tolerance cm3/1000s. : + 25.0
Pressure hPa rack travel mm Tolerance mm	: 9.80	LOW IDLE Del. quantity
START CUT-OUT Rated speed rpm Check speed 1/min	: > 100 : > 80	
FUEL DELIVERY CHA	ARACTERISTICS	Check tolerance cm3/1000s. : 8.0
Aneroid pressure hPa Rated speed rpm Del. quantity cm3/1000 strokes Tolerance cm3/1000 strokes Check tolerance cm3/1000s. Aneroid pressure hPa Rated speed rpm	: 167.5	End of test specification shee

Tolerance cm3/1000 strokes Check tolerance	-
cm3/1000s.	: + 4.0
BREAKAWAY	
Rack travel in mm Rated speed rpm Tolerance 1/min	: 11.45 : 1145 : + 5
STARTING FUEL DEL	IVERY
Rated speed rpm	: 100
rack travel mm	: 21.00
Tolerance mm	: + 0.50
Del. quantity	
cm3/1000 strokes	: 105.0
Tolerance	
cm3/1000 strokes	: + 20.0
Check tolerance	. 25.8
cm3/1000s.	: ← 25.0
LOW IDLE Del. quantity cm3/1000 strokes Tolerance cm3/1000 strokes Check tolerance cm3/1000s. Spreed Tolerance cm3/1000 strokes Check tolerance cm3/1000 strokes Check tolerance cm3/1000s.	
End of test specif	ication sheet

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

Edition : 08.03.96 Test oil : ISO 4113

Combination No. : 0 402 076 782

Injection pump

Pump designation : PES6P120A720RS3352 EP type number : 0 412 026 780

Governor

Governer design. : RSV400...1100P2A599

: -3

Governer no. : 0 421 833 497

Cust. part No. : RE63766

Customer—spec. information
Customer : DEERE
Motor : 6081AF001
Power KW : 187.0

TEST BENCH REQUIREMENTS

Inlet line : 4.2

Test oil inlet

temp. °C : 40
Tolerance °C : + 2.0

Overflow valve : 1 457 413 010

Inlet press. bar : 2.0

Test nozzle holde

assembly : 1 688 901 101

Opening pressure

bar : 208.5 Tolerance bar : + 1.5

Test Lines : 1 680 750 015

Outside diameter : 6.0

x inside diameter: 3.0 x length mm : 600

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant.

per values _____

BEGINNING OF DELIVERY

Test pressure bar : 17.0 Tolerance bar : + 1.0

Prestroke mm : 3.60
Tolerance mm : + 0.05
Check

tolerance mm : + 0.10

Rack travel in mm : 10.50
Tolerance mm : + 1.50

Firing order : 1-5-3-6-2-

: 4

Phasing : 0-60-120-180-240

: -300

Tolerance : + 0.30

Check

tolerance °NW : + 0.75

Start of delivery mark

*NW after s.o.d. : 8.00 Tolerance : + 0.50

Check

tolerance °NW : + 0.75

Barrel no. : 1

Beginning of delivery differende

and maximum rack

travel : 14.00 Difference ° CS : 2.50

BASIC SETTING

Rated speed rpm : 1100

	+ Check tolerance + cm3/1000s. : +- 3.0
Rack travel in mm : 12.45	+ Spreed
Tolerance mm : + 0.05	+ Tolerance
	+ cm3/1000 strokes : 4.0
Del. quantity	+ Check tolerance
cm3/1000 strokes : 161.0	+ cm3/1000s. : 6.5
Tolerance	+
cm3/1000 strokes : +- 1.0	
	+ CONTROL LEVER
Check tolerance	+
cm3/1000s. : +- 3.0	+ control lever
	position degree : 97.0
Spreed	+ tolerance degree : +- 4.0
Tolerance	†
cm3/1000 strokes : 4.0	+ RATED SPEED
Check tolerance	+ rack travel mm : 11.45
cm3/1000s. : 6.5	+ Rated speed rpm : 1145
A. 1	Tolerance 1/min : +- 5
Del. quantity	†
cm3/1000 strokes : 24.5	+ rack travel mm : 4.00
Tolerance	+ Rated speed rpm : 1205
cm3/1000 strokes : + 2.0	+ Tolerance 1/min : + 5
Check tolerance	†
cm3/1000s. : +- 4.5	rack travel mm : 0.85
Spreed	Tolerance mm : + 0.55
Tolerance	Rated speed rpm : 1350
cm3/1000 strokes : 6.0	†
Check tolerance	+ rack travel mm : 4.00
cm3/1000s. : 8.0	Rated speed rpm : 1215
	†
(D) CETTING OF THEFETTAL DUMB	†
(B) SETTING OF INJECTION PUMP WITH GOVERNOR	LOW IDLE
MILL GOVERNOR	I LOW IDEE
	\mathbf{I}
	I control lever
GUIDE SLEEVE POSITION	position degree : 73.0
GOIDE DEEEAE COI! TO!4	tolerance degree : +- 4.0
Rated speed rpm : 800	
riduca speca i pin	Setting point w/out bumper sp
Rack travel in mm : 0.50	t occerning portion would builder op
Tolerance mm : +- 0.20	Rated speed rpm : 400
10 CC di 10C (fpi)	rack travel mm : 5.20
governor spring	1 451 51 51 51 51
pre-tension	+ Testing:
click setting x : 4.25	
The state of the s	+ Rated speed rpm : 400
	- rack travel mm : 5.70
FULL LOAD DELIVERY AT FULL LOAD STOP	
	+
Rated speed rpm : 1100	Rated speed rpm : 100
Aneroid pressure	+
hPa : 1600	+ CRT mm min. : > 19.00
Del. quantity	+
cm3/1000 strokes : 161.0	1
Tolerance	+ TORQUE CONTROL
cm3/1000 strokes : + 1.0	+
	•

Check tolerance cm3/1000s. Spreed Tolerance cm3/1000 strokes Check tolerance cm3/1000s.	: +- 3.0 : 4.0 : 6.5
CONTROL LEVER	
control lever position degree tolerance degree	: 97.0 : +- 4.0
RATED SPEED	
rack travel mm Rated speed rpm Tolerance 1/min	: 11.45 : 1145 : +- 5
rack travel mm Rated speed rpm Tolerance 1/min	: 4.00 : 1205 : + 5
rack travel mm Tolerance mm Rated speed rpm	: 0.85 : +- 0.55 : 1350
rack travel mm Rated speed rpm	: 4.00 : 1215
LOW IDLE	
control lever position degree tolerance degree	: 73.0 : +- 4.0
Setting point w/ou	nt bumper spring
Rated speed rpm rack travel mm	: 400 : 5.20
Testing:	
Rated speed rpm rack travel mm Tolerance mm	: 400 : 5.70 : +- 0.10

Rated speed rpm : 1100 rack travel mm : 12.45 Tolerance mm : + 0.05 Rated speed rpm : 700 rack travel mm : 12.80 Tolerance mm : + 0.10	Del. quantity cm3/1000 strokes : 71.0 Tolerance cm3/1000 strokes : + 2.0 Check tolerance cm3/1000s. : + 4.0
ANEROID/ALTITUDE COMPENSATOR TEST	- + BREAKAWAY - Rack travel in mm : 11.45
SETTING	Rated speed rpm : 1145 Tolerance 1/min : +- 5
Rated speed rpm : 500 Pressure hPa : 1600	STARTING FUEL DELIVERY
MEASUREMENT Pressure hPa : - Rated speed rpm : 500 rack travel mm : 8.80 Tolerance mm : + 0.20	Rated speed rpm : 100 rack travel mm : 21.00 Tolerance mm : + 0.50 Del. quantity cm3/1000 strokes : 105.0
Rated speed rpm : 500	+ Tolerance + cm3/1000 strokes : +- 20.0 + Check tolerance
Pressure hPa : 960 rack travel mm : 11.70 Tolerance mm : +- 0.20	cm3/1000s. : ← 25.0
Pressure hPa : 475 rack travel mm : 9.80 Tolerance mm : + 0.05	LOW IDLE Del. quantity cm3/1000 strokes : 24.5
START CUT-OUT	Tolerance cm3/1000 strokes : + 2.0
Rated speed rpm : > 100 Check	+ Check tolerance + cm3/1000s. : + 4.5 + Spreed
speed 1/min : > 80	Tolerance cm3/1000 strokes : 6.0 Check tolerance
FUEL DELIVERY CHARACTERISTICS	cm3/1000s. : 8.0
Aneroid pressure hPa : 1600 Rated speed rpm : 700	
Del. quantity cm3/1000 strokes : 167.5 Tolerance cm3/1000 strokes : +- 2.0 Check tolerance cm3/1000s. : +- 4.0	End of test specification sheet
Aneroid pressure hPa : - Rated speed rpm : 500	† †

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

Edition : 08.03.96 Test oil : ISO 4113

Combination No. : 0 402 076 785

Injection pump

Pump designation : PES6P12OA72ORS3352 EP type number : 0 412 026 780

Governor

Governer design. : RSV400...750P4A611

: -1

Governer no. : 0 421 833 514

Cust. part No. : RE66449

Customer-spec. information
Customer : DEERE
Motor : 6081AF001
Power KW : 135.0

TEST BENCH REQUIREMENTS

Inlet line : 4.2

Test oil inlet

temp. °C : 40
Tolerance °C : +- 2.0

Overflow valve : 1 457 413 010

Inlet press. bar : 2.0

Test nozzle holde

assembly : 1 688 901 101

Opening pressure

bar : 208.5 Tolerance bar : + 1.5

Test Lines : 1 680 750 015

Outside diameter : 6.0

x inside diameter: 3.0 x length mm : 600

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant.

per values ____

BEGINNING OF DELIVERY

Test pressure bar : 17.0 Tolerance bar : +- 1.0

Prestroke mm : 3.60
Tolerance mm : + 0.05
Check

tolerance mm : + 0.10

Rack travel in mm: 10.50
Tolerance mm: + 1.50

Firing order : 1-5-3-6-2-

: 4

Phasing : 0-60-120-180-240

: -300 : +- 0.30

Tolerance Check

tolerance °NW : +- 0.75

Start of delivery mark

*NW after s.o.d. : 7.00 Tolerance : + 0.50

Check

tolerance °NW : + 0.75

Barrel no. : 1

Beginning of delivery differende

and maximum rack

travel : 14.00 Difference ° CS : 2.50

BASIC SETTING

Rated speed rpm : 700

Rack travel in mm: 13.90 Tolerance mm: + 0.05 Del. quantity cm3/1000 strokes: 200.0	Check tolerance cm3/1000s. : +- 3.0 Spreed Tolerance cm3/1000 strokes : 4.0 Check tolerance cm3/1000s. : 6.5
Tolerance cm3/1000 strokes : + 1.0	CONTROL LEVER
Check tolerance cm3/1000s. : +- 3.0	control lever position degree : 90.0
Spreed Tolerance cm3/1000 strokes : 4.0	tolerance degree : +- 4.D RATED SPEED
Check tolerance - 6.5	rack travel mm : 12.90 Rated speed rpm : 760 Tolerance 1/min : +- 5
Del. quantity cm3/1000 strokes : 30.0 - Tolerance cm3/1000 strokes : +- 3.0 -	rack travel mm : 4.00 Rated speed rpm : 795 Tolerance 1/min : +- 5
Check tolerance cm3/1000S. : +- 5.0 Spreed Tolerance	rack travel mm : 0.85 Tolerance mm : + 0.55 Rated speed rpm : 950
cm3/1000 strokes : 6.0 Check tolerance cm3/1000s. : 8.0	rack travel mm : 4.00 Rated speed rpm : 830
(B) SETTING OF INJECTION PUMP WITH GOVERNOR	- LOW IDLE
GUIDE SLEEVE POSITION	- control lever - position degree : 73.0 - tolerance degree : + 4.0
Rated speed rpm : 800	Setting point w/out bumper spring
Rack travel in mm: 0.50 Tolerance mm: + 0.20	- Rated speed rpm : 400 - rack travel mm : 5.40
governor spring pre-tension click setting x : 4.00	- - Testing: - - Rated speed rpm : 400
FULL LOAD DELIVERY AT FULL LOAD STOP	rack travel mm : 5.90 Tolerance mm : + 0.10
Rated speed rpm : 700 Aneroid pressure	- Rated speed rpm : 100
hPa : - Del. quantity cm3/1000 strokes : 200.0	CRT mm min. : > 19.00
Tolerance + 1.0 +	TORQUE CONTROL

START CUT-OUT				
Rated speed rpm	:	>	100	
Check speed 1/min	:	>	80	
BREAKAWAY				
Rack travel in mm Rated speed rpm Tolerance 1/min		+-	12.90 760 5	
STARTING FUEL DELI		ERY		
Rated speed rpm rack travel mm Tolerance mm	:	+	100 20.50 0.50	
Del. quantity cm3/1000 strokes Tolerance	:		105.0	
cm3/1000 strokes Check tolerance	•	+-	20.0	
cm3/1000s.	:	+	25.0	
LOW IDLE				
Del. quantity cm3/1000 strokes	•		30.0	
Tolerance cm3/1000 strokes		+-	3.0	
Check tolerance	•	+-	5.0	
Spreed Tolerance	-		_ • •	
cm3/1000 strokes Check tolerance	:		6.0	
cm3/1000s.	:		8.0	

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

Edition : 08.03.96 Test oil : ISO 4113

Combination No. : 0 402 076 786

Injection pump

Pump designation : PES6P120A720RS3352

EP type number : 0 412 026 780

Governor

Governer design. : RSV400...750P4A606

: -1

Governer no. : 0 421 833 515

Cust. part No. : RE66456

Customer-spec. information
Customer : DEERE
Motor : 6081AF001
Power KW : 135.0

TEST BENCH REQUIREMENTS

Inlet line : 4.2

Test oil inlet

temp. *C : 40
Tolerance *C : + 2.0

Overflow valve : 1 457 413 010

Inlet press. bar : 2.0

Test nozzle holde

assembly : 1 688 901 101

Opening pressure

bar : 208.5 Tolerance bar : + 1.5

Test lines : 1 680 750 015

Outside diameter : 6.0

x inside diameter: 3.0 x length mm : 600

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant.

per values

BEGINNING OF DELIVERY

Test pressure bar : 17.0 Tolerance bar : + 1.0

Prestroke mm : 3.60
Tolerance mm : + 0.05
Check

Check

tolerance mm : \leftarrow 0.10

Rack travel in mm : 10.50 Tolerance mm : +- 1.50

Firing order : 1-5-3-6-2-

: 4

Phasing : 0-60-120-180-240

: -300

Tolerance : \leftarrow 0.30

Check

tolerance °NW : +- 0.75

Start of delivery mark

 $^{\circ}$ NW after s.o.d. : 7.00 Tolerance : + 0.50

Check : 4- U.SU

CHECK

tolerance *NW : + 0.75

Barrel no. : 1

Beginning of delivery differende

and maximum rack

travel : 14.00 Difference ° CS : 2.50

BASIC SETTING

<u> </u>	Check tolerance cm3/1000s. : +- 3.0
Rack travel in mm: 13.90 Tolerance mm: + 0.05	Spreed Tolerance
Del. quantity	cm3/1000 strokes : 4.0 Check tolerance
cm3/1000 strokes : 200.0	cm3/1000s. : 6.5
Tolerance cm3/1000 strokes : + 1.0	CONTROL LEVER
Check tolerance cm3/1000s. : + 3.0	control lever
Spreed Tolerance	position degree : 90.0 tolerance degree : + 4.0
cm3/1000 strokes : 4.0	RATED SPEED
Check tolerance cm3/1000s. : 6.5	rack travel mm : 12.90 Rated speed rpm : 760 Tolerance 1/min : +- 5
Del. quantity cm3/1000 strokes : 30.0 Tolerance	rack travel mm : 4.00 Rated speed rpm : 795
cm3/1000 strokes : +- 3.0 +- Check tolerance	Tolerance 1/min : +- 5
cm3/1000s. : +- 5.0 +- 5.0	rack travel mm : 0.85 Tolerance mm : + 0.55
Tolerance + cm3/1000 strokes : 6.0 +	Rated speed rpm : 950
Check tolerance cm3/1000s. : 8.0	rack travel mm : 4.00 Rated speed rpm : 830
(B) SETTING OF INJECTION PUMP WITH GOVERNOR	LOW IDLE
GUIDE SLEEVE POSITION	<pre>control lever position degree : 73.0 tolerance degree : +- 4.0</pre>
Rated speed rpm : 800	Setting point w/out bumper spring
Rack travel in mm: 0.50 Tolerance mm: + 0.20	Rated speed rpm : 400 rack travel mm : 5.40
governor spring pre-tension	Testing:
click setting x : 4.00	Rated speed rpm : 400 rack travel mm : 5.90
FULL LOAD DELIVERY AT FULL LOAD STOP	Tolerance mm : + 0.10
Rated speed rpm : 700 Aneroid pressure	Rated speed rpm : 100
hPa : - +	CRT mm min. :> 19.00
cm3/1000 strokes : 200.0 +	TORQUE CONTROL
cm3/1000 strokes : + 1.0 +	

Rated speed rpm rack travel mm Tolerance mm	:	+-	700 13.90 0.05	
START CUT-OUT				
Rated speed rpm	:	>	100	
Check speed 1/min	:	>	80	
BREAKAWAY				
Rack travel in mm Rated speed rpm Tolerance 1/min	•	+	12.90 760 5	
STARTING FUEL DELI	[VI	ERY		
Rated speed rpm rack travel mm Tolerance mm Del. quantity	•	+	100 20.50 0.50	
cm3/1000 strokes Tolerance	:		105.0	
cm3/1000 strokes Check tolerance	:	+-	20.0	
cm3/1000s.	•	T	25.0	
LOW IDLE				
Del. quantity cm3/1000 strokes Tolerance	:		30.0	
cm3/1000 strokes Check tolerance	:	+-	3.0	
cm3/1000s. Spreed Tolerance	:	+-	5.0	
cm3/1000 strokes Check tolerance	:		6.0	
cm3/1000s.	:		8.0	

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

Edition : 11.03.96 Test oil : ISO 4113

Combination No. : 0 402 736 868

Injection pump

Pump designation : PES6P120A120RS7351 EP type number : 0 412 726 922

Governor

Governer design. : RQV350...1100PA1173K

Governer no. : 0 421 815 439

Cust. part No. : 3928157

Customer-spec. information
Customer : CDC
Motor : 6CTA-A
Power KW : 224.0

TEST BENCH REQUIREMENTS

Inlet line : 3.2

Test oil inlet

temp. °C : 40
Tolerance °C : + 2.0

Overflow valve : 2 417 413 086

Inlet press. bar : 2.0
Tolerance bar : + 0.1

Test nozzle holde

assembly : 1 688 901 103

Opening pressure

bar : 208.5 Tolerance bar : + 1.5

Test lines : 1 680 750 015

Outside diameter : 6.0

x inside diameter: 3.0 x length mm : 600

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant.

per values ____

BEGINNING OF DELIVERY

Test pressure bar : 17.0 Tolerance bar : + 1.0

Prestroke mm : 4.00
Tolerance mm : + 0.05
Check

tolerance mm : + 0.10

Rack travel in mm : 10.50 Tolerance mm : + 1.50

Firing order : 1-5-3-6-2-

: 4

Phasing : 0-60-120-180-240

: −300 : +- 0.30

Check

Tolerance

tolerance *NW : + 0.75

Start of delivery blocking

*NW after s.o.d. : 6.25 Tolerance : + 0.50

Check

tolerance *NW : +- 0.75

Barrel no. : 1

BASIC SETTING

Rated speed rpm : 1100

Rack travel in mm : 15.25 Tolerance mm : + 0.05

Del. quantity cm3/1000 strokes	: 243.5	<u> </u>
		FULL LOAD DELIVERY AT FULL LOAD STOP
Tolerance cm3/1000 strokes	: +- 1.0	Rated speed rpm : 1100 Aneroid pressure
Check tolerance cm3/1000s.	: +- 4.0	+ hPa : 1200 + Del. quantity
Spreed		+ cm3/1000 strokes : 243.5 + Tolerance
Tolerance cm3/1000 strokes	: 5.0	+ cm3/1000 strokes : + 1.0 + Check tolerance + cm3/1000s. : + 4.0
Check tolerance cm3/1000s.	; 9.0	Spreed Tolerance
Del. quantity		cm3/1000 strokes : 5.0 Check tolerance
cm3/1000 strokes Tolerance	: 24.0	- cm3/1000s. : 9.0
cm3/1000 strokes Check tolerance	: ← 3.0	
cm3/1000s. Spreed	: +- 5.0	CONTROL LEVER
Tolerance		+ control lever
cm3/1000 strokes	: 8.0	position degree : 119.0
Check tolerance	40.0	+ tolerance degree : +- 6.0
cm3/1000s.	: 12.0	RATED SPEED
(B) SETTING OF I	VIECTION DIMD	† rack travel mm : 13.60
WITH GOVERNOR	40 CC 1 TOW 1 OF II	Rated speed rpm : 1255
		Tolerance 1/min : + 15
GUIDE SLEEVE TRAN	VEL.	rack travel mm : 4.00 Rated speed rpm : 1400
Rated speed rpm guide sleeve	: 350	Tolerance 1/min : + 5
travel mm	: 2.11	† rack travel mm : 0.50
Tolerance mm	: +- 0.20	+ Tolerance mm : + 0.50
Rated speed rpm	: 1159	+ Rated speed rpm : 1500
guide sleeve travel mm	: 7.79	
Tolerance mm	: + 0.15	LOW IDLE
Rated speed rpm guide sleeve	: 726	t cantrol lever
travel mm	: 4.80	position degree : 71.0
Tolerance mm	: + 0.25	tolerance degree : +- 6.0
Rated speed rpm guide sleeve	: 420	Testing:
travel mm	: 3.10	+ Rated speed rpm : 350
Tolerance mm	: 	+ rack travel mm : 6.60 + Tolerance mm : + 0.20
Rated speed rpm guide sleeve	: 1640	+ Rated speed rpm : 275
travel mm	: 13.50	+
Tolerance mm	: + 0.50	+ CRT mm min. : > 7.80

FUEL DELIVERY CHARACTERISTICS Aneroid pressure rack travel mm : 15.25 Rated speed rpm : 650 Rated speed rpm : 650 Rated speed rpm : 13.40 Rated speed rpm : 650 Rated speed rpm : 13.40 Rated speed rpm : 13.40 Tolerance mm : + 0.20 Rated speed rpm : 13.40 Tolerance mm : + 0.20 Rated speed rpm : 10.0 Rated speed rpm : 14.70 Tolerance mm : + 0.20 Rated speed rpm : 10.0 Rated speed rpm : 14.70 Tolerance mm : + 0.10 Rated speed rpm : 750 Rated speed rpm : 750 Rated speed rpm : 13.70 Tolerance mm : + 0.20 ANEROID/ALTITUDE COMPENSATOR TEST ANEROID/ALTITUDE COMPENSATOR TEST Rated speed rpm : 1100 Pressure hPa : 1200 Rated speed rpm : 1100 Pressure hPa : 1200 Rated speed rpm : 1200 Rated speed rpm : 100 Rated speed rpm : 100 Rated speed rpm : 100 Rated speed rpm : 15.50 Tolerance mm : + 0.20 Rated speed rpm : 100 Rated speed rpm : 100 Rated speed rpm : 15.50 Tolerance mm : + 0.20 Rated speed rpm : 100 Rated speed rpm : 100 Rated speed rpm : 100 Rated speed rpm : 100 Rated speed rpm : 100 Rated speed rpm : 100 Rated speed rpm : 100 Rated speed rpm : 100 Rated speed rpm : 15.50 Tolerance mm : + 0.20 Rated speed rpm : 100 Rated speed rpm : 100 Rated speed rpm : 100 Rated speed rpm : 100 Rated speed rpm : 100 Rated speed rpm : 100 Rated speed rpm : 100 Rated speed rpm : 100 Rated speed rpm : 100 Rated speed rpm : 100 Rated speed rpm : 100 Rated speed rpm : 255 Tolerance mm : + 0.50 DeL quantity cm3/1000 strokes : 40.0 Tolerance cm3/1000 strokes : 40.0 Tolerance cm3/1000 strokes : 40.0 Tolerance cm3/1000 strokes : 40.0 Tolerance cm3/1000 strokes : 40.0 Tolerance cm3/1000 strokes : 40.0 Tolerance cm3/1000 strokes : 40.0 Tolerance cm3/1000 strokes : 40.0 Tolerance cm3/1000 strokes : 40.0 Tolerance cm3/1000 strokes : 40.0 Tolerance cm3/1000 strokes : 40.0 Tolerance cm3/1000 strokes : 40.0 Tolerance cm3/1000 strokes : 40.0 Tolerance cm3/1000 strokes : 40.0 Tolerance cm3/1000 strokes : 40.0 Tolerance cm3/1000 strokes : 40.0 Tolerance cm3/1000 strokes : 40.0 Tolerance cm3/1000 strokes : 40.0 Tolerance cm3/1000 strokes : 40.	Rated speed rpm	: 425	†
Aneroid pressure 1200 Pack travel mm 15.25 Pack travel mm 15.25 Pack travel mm 15.25 Pack travel mm 15.25 Pack travel mm 13.40 Pack travel mm 13.40 Pack travel mm 14.70 Pack travel mm 15.70 Pack travel mm 15.50 Pack travel mm 1			- FUEL DELIVERY CHARACTERISTICS
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Check tolerance cm3/1000s. : + 3.0			† Tolerance
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START CUT-OUT			
Rated speed rpm : > 100 Rated speed rpm : < 290 Check speed 1/min : > 80 Check speed 1/min : < 300 Del. quantity cm3/1000 strokes : 24.0 Tolerance			
Check speed 1/min : > 80 Check speed 1/min : < 300 Del. quantity cm3/1000 strokes : 24.0 Tolerance	START CUT-OUT		† cm3/1000\$. : +- 25.0
Check speed 1/min : > 80 Check speed 1/min : < 300 Del. quantity cm3/1000 strokes : 24.0 Tolerance	Rated speed rom	: > 100	Ţ
speed 1/min :> 80 Check speed 1/min :< 300 Del. quantity cm3/1000 strokes : 24.0 Tolerance			+
speed 1/min :> 80 Check speed 1/min :< 300 Del. quantity cm3/1000 strokes : 24.0 Tolerance			1011 7015
Check		• > •0	+ LOW IDLE
speed 1/min : < 300 + cm3/1000 strokes : 24.0 + Tolerance		;	I Del quantity
+ Tolerance		: < 300	
+ cm3/1000 strokes : + 3.0	-1	. • • •	+ Tolerance
			+ cm3/1000 strokes : $+$ 3.0

Check tolerance cm3/1000s.	; +-	5.0
Spreed		
Tolerance cm3/1000 strokes Check tolerance	:	8.0
cm3/1000s.	:	12.0

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

: 11.03.96 Edition Test oil : ISO 4113

Combination No. : 0 402 736 872

Injection pump

Pump designation : PES6P120A120RS7370

EP type number : 0 412 726 924

Governor

Governer design. : RQV350...1100PA1177K

Governer no. : 0 421 815 443

Cust. part No. : 3928154

Customer-spec. information Customer : CDC Motor : 6CTA-A : 186.0

Power KW

TEST BENCH REQUIREMENTS

Inlet line : 3.2

Test oil inlet

temp. °C : +- 2.0 Tolerance *C

Overflow valve : 2 417 413 086

Inlet press. bar : 2.0 Tolerance bar : + 0.1

Test nozzle holde

: 1 688 901 103 assembly

Opening pressure

: 208.5 bar : +- 1.5 Tolerance bar

Test lines : 1 680 750 015

Outside diameter : 6.0

x inside diameter: 3.0 x length mm :

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant.

per values _____

BEGINNING OF DELIVERY

Test pressure bar : 17.0 Tolerance bar : + 1.0

Prestroke mm : 4.00 Tolerance mm : + 0.05 Check

tolerance mm : + 0.10

Rack travel in mm: 10.50 Tolerance mm : +- 1.50

: 1-5-3-6-2-Firing order : 4

: 0-60-120-180-240 Phasing

: -300 : +- 0.30

Check

Tolerance

tolerance "NW : + - 0.75

Start of delivery blocking

*NW after s.o.d. : 5.50 : +- 0.50 Tolerance

Check

tolerance °NW : + 0.75

Barrel no. : 1

BASIC SETTING

Rated speed rpm : 1000

Rack travel in mm: 13.85
Tolerance mm: + 0.05

Del. quantity	+
cm3/1000 strokes : 216.5	† rack travel mm : 12.40
	+ Rated speed rpm : 1165
Tolerance	+ Tolerance 1/min : + 15
cm3/1000 strokes : + 1.0	+
	† rack travel mm : 4.00
Check tolerance	+ Rated speed rpm : 1300
cm3/1000s. : +- 4.0	+ Tolerance 1/min : + 5
	+
Spreed	+ rack travel mm : 0.50
Tolerance	+ Tolerance mm : + 0.50
cm3/1000 strokes : 5.0	+ Rated speed rpm : 1400
	†
Check tolerance	†
cm3/1000s. : 9.0	. 41. 25. 2
N. A	+ LOW IDLE
Del. quantity	†
cm3/1000 strokes : 25.0	†
Tolerance	+ control lever
cm3/1000 strokes : +- 3.0	+ position degree : 68.0
Check tolerance	tolerance degree : +- 6.0
cm3/1000s. : +- 5.0	† <u> </u>
Spreed	† Testing:
Tolerance	750
cm3/1000 strokes : 8.0	Rated speed rpm : 350
Check tolerance	rack travel mm : 6.50
cm3/1000s. : 12.0	+ Tolerance mm : + 0.20
	Rated speed rpm : 275
(B) SETTING OF INJECTION PUMP	+ Rated speed rpm : 275
WITH GOVERNOR	T CRT mm min. :> 8.10
MILL GOACUIOK	
	Rated speed rpm : 425
	Added Speed (pii)
	+
FULL LOAD DELIVERY AT FULL LOAD STOP	<u> </u>
FULL LOAD DELIVERY AT FULL LOAD STOP	TORQUE CONTROL
	TORQUE CONTROL
Rated speed rpm : 1000	+
Rated speed rpm : 1000 Aneroid pressure	+ Rated speed rpm : 1000
Rated speed rpm : 1000 Aneroid pressure hPa : 1200	+ Rated speed rpm : 1000 + rack travel mm : 13.85
Rated speed rpm : 1000 Aneroid pressure hPa : 1200 Del. quantity	+ Rated speed rpm : 1000 + rack travel mm : 13.85
Rated speed rpm : 1000 Aneroid pressure hPa : 1200 Del. quantity	Rated speed rpm : 1000 rack travel mm : 13.85 Tolerance mm : + 0.05 Rated speed rpm : 650
Rated speed rpm : 1000 Aneroid pressure hPa : 1200 Del. quantity cm3/1000 strokes : 216.5	Rated speed rpm : 1000 rack travel mm : 13.85 Tolerance mm : + 0.05 Rated speed rpm : 650
Rated speed rpm : 1000 Aneroid pressure hPa : 1200 Del. quantity cm3/1000 strokes : 216.5 Tolerance	Rated speed rpm : 1000 rack travel mm : 13.85 Tolerance mm : + 0.05 Rated speed rpm : 650
Rated speed rpm : 1000 Aneroid pressure hPa : 1200 Del. quantity cm3/1000 strokes : 216.5 Tolerance cm3/1000 strokes : +- 1.0	Rated speed rpm : 1000 rack travel mm : 13.85 Tolerance mm : + 0.05 Rated speed rpm : 650 rack travel mm : 13.30 Tolerance mm : + 0.20
Rated speed rpm : 1000 Aneroid pressure hPa : 1200 Del. quantity cm3/1000 strokes : 216.5 Tolerance cm3/1000 strokes : + 1.0 Check tolerance	Rated speed rpm : 1000 rack travel mm : 13.85 Tolerance mm : + 0.05 Rated speed rpm : 650 rack travel mm : 13.30 Tolerance mm : + 0.20 Rated speed rpm : 1100
Rated speed rpm : 1000 Aneroid pressure hPa : 1200 Del. quantity cm3/1000 strokes : 216.5 Tolerance cm3/1000 strokes : + 1.0 Check tolerance cm3/1000s. : + 4.0 Spreed Tolerance	Rated speed rpm : 1000 rack travel mm : 13.85 Tolerance mm : + 0.05 Rated speed rpm : 650 rack travel mm : 13.30 Tolerance mm : + 0.20 Rated speed rpm : 1100 rack travel mm : 13.50
Rated speed rpm : 1000 Aneroid pressure hPa : 1200 Del. quantity cm3/1000 strokes : 216.5 Tolerance cm3/1000 strokes : + 1.0 Check tolerance cm3/1000s. : + 4.0 Spreed Tolerance cm3/1000 strokes : 5.0	Rated speed rpm : 1000 rack travel mm : 13.85 Tolerance mm : + 0.05 Rated speed rpm : 650 rack travel mm : 13.30 Tolerance mm : + 0.20 Rated speed rpm : 1100
Rated speed rpm : 1000 Aneroid pressure hPa : 1200 Del. quantity cm3/1000 strokes : 216.5 Tolerance cm3/1000 strokes : + 1.0 Check tolerance cm3/1000s. : + 4.0 Spreed Tolerance cm3/1000 strokes : 5.0 Check tolerance	Rated speed rpm : 1000 rack travel mm : 13.85 Tolerance mm : + 0.05 Rated speed rpm : 650 rack travel mm : 13.30 Tolerance mm : + 0.20 Rated speed rpm : 1100 rack travel mm : 13.50
Rated speed rpm : 1000 Aneroid pressure hPa : 1200 Del. quantity cm3/1000 strokes : 216.5 Tolerance cm3/1000 strokes : + 1.0 Check tolerance cm3/1000s. : + 4.0 Spreed Tolerance cm3/1000 strokes : 5.0	Rated speed rpm : 1000 rack travel mm : 13.85 Tolerance mm : + 0.05 Rated speed rpm : 650 rack travel mm : 13.30 Tolerance mm : + 0.20 Rated speed rpm : 1100 rack travel mm : 13.50 Tolerance mm : + 0.10
Rated speed rpm : 1000 Aneroid pressure hPa : 1200 Del. quantity cm3/1000 strokes : 216.5 Tolerance cm3/1000 strokes : + 1.0 Check tolerance cm3/1000s. : + 4.0 Spreed Tolerance cm3/1000 strokes : 5.0 Check tolerance	Rated speed rpm : 1000 rack travel mm : 13.85 Tolerance mm : + 0.05 Rated speed rpm : 650 rack travel mm : 13.30 Tolerance mm : + 0.20 Rated speed rpm : 1100 rack travel mm : 13.50 Tolerance mm : + 0.10 ANEROID/ALTITUDE
Rated speed rpm : 1000 Aneroid pressure hPa : 1200 Del. quantity cm3/1000 strokes : 216.5 Tolerance cm3/1000 strokes : + 1.0 Check tolerance cm3/1000s. : + 4.0 Spreed Tolerance cm3/1000 strokes : 5.0 Check tolerance	Rated speed rpm : 1000 rack travel mm : 13.85 Tolerance mm : + 0.05 Rated speed rpm : 650 rack travel mm : 13.30 Tolerance mm : + 0.20 Rated speed rpm : 1100 rack travel mm : 13.50 Tolerance mm : + 0.10
Rated speed rpm : 1000 Aneroid pressure hPa : 1200 Del. quantity cm3/1000 strokes : 216.5 Tolerance cm3/1000 strokes : + 1.0 Check tolerance cm3/1000s. : + 4.0 Spreed Tolerance cm3/1000 strokes : 5.0 Check tolerance cm3/1000 strokes : 9.0	Rated speed rpm : 1000 rack travel mm : 13.85 Tolerance mm : + 0.05 Rated speed rpm : 650 rack travel mm : 13.30 Tolerance mm : + 0.20 Rated speed rpm : 1100 rack travel mm : 13.50 Tolerance mm : + 0.10 ANEROID/ALTITUDE
Rated speed rpm : 1000 Aneroid pressure hPa : 1200 Del. quantity cm3/1000 strokes : 216.5 Tolerance cm3/1000 strokes : + 1.0 Check tolerance cm3/1000s. : + 4.0 Spreed Tolerance cm3/1000 strokes : 5.0 Check tolerance	Rated speed rpm : 1000 rack travel mm : 13.85 Tolerance mm : + 0.05 Rated speed rpm : 650 rack travel mm : 13.30 Tolerance mm : + 0.20 Rated speed rpm : 1100 rack travel mm : 13.50 Tolerance mm : + 0.10 ANEROID/ALTITUDE COMPENSATOR TEST
Rated speed rpm : 1000 Aneroid pressure hPa : 1200 Del. quantity cm3/1000 strokes : 216.5 Tolerance cm3/1000 strokes : + 1.0 Check tolerance cm3/1000s. : + 4.0 Spreed Tolerance cm3/1000 strokes : 5.0 Check tolerance cm3/1000s. : 9.0 CONTROL LEVER	Rated speed rpm : 1000 rack travel mm : 13.85 Tolerance mm : + 0.05 Rated speed rpm : 650 rack travel mm : 13.30 Tolerance mm : + 0.20 Rated speed rpm : 1100 rack travel mm : 13.50 Tolerance mm : + 0.10 ANEROID/ALTITUDE
Rated speed rpm : 1000 Aneroid pressure hPa : 1200 Del. quantity cm3/1000 strokes : 216.5 Tolerance cm3/1000 strokes : + 1.0 Check tolerance cm3/1000s. : + 4.0 Spreed Tolerance cm3/1000 strokes : 5.0 Check tolerance cm3/1000s. : 9.0 CONTROL LEVER control lever	Rated speed rpm : 1000 rack travel mm : 13.85 Tolerance mm : + 0.05 Rated speed rpm : 650 rack travel mm : 13.30 Tolerance mm : + 0.20 Rated speed rpm : 1100 rack travel mm : 13.50 Tolerance mm : + 0.10 ANEROID/ALTITUDE COMPENSATOR TEST SETTING
Rated speed rpm : 1000 Aneroid pressure hPa : 1200 Del. quantity cm3/1000 strokes : 216.5 Tolerance cm3/1000 strokes : + 1.0 Check tolerance cm3/1000s. : + 4.0 Spreed Tolerance cm3/1000 strokes : 5.0 Check tolerance cm3/1000 strokes : 9.0 CONTROL LEVER control lever position degree : 120.0	Rated speed rpm : 1000 rack travel mm : 13.85 Tolerance mm : + 0.05 Rated speed rpm : 650 rack travel mm : 13.30 Tolerance mm : + 0.20 Rated speed rpm : 1100 rack travel mm : 13.50 Tolerance mm : + 0.10 ANEROID/ALTITUDE COMPENSATOR TEST SETTING Rated speed rpm : 1000
Rated speed rpm : 1000 Aneroid pressure hPa : 1200 Del. quantity cm3/1000 strokes : 216.5 Tolerance cm3/1000 strokes : + 1.0 Check tolerance cm3/1000s. : + 4.0 Spreed Tolerance cm3/1000 strokes : 5.0 Check tolerance cm3/1000s. : 9.0 CONTROL LEVER control lever	Rated speed rpm : 1000 rack travel mm : 13.85 Tolerance mm : + 0.05 Rated speed rpm : 650 rack travel mm : 13.30 Tolerance mm : + 0.20 Rated speed rpm : 1100 rack travel mm : 13.50 Tolerance mm : + 0.10 ANEROID/ALTITUDE COMPENSATOR TEST SETTING
Rated speed rpm : 1000 Aneroid pressure hPa : 1200 Del. quantity cm3/1000 strokes : 216.5 Tolerance cm3/1000 strokes : + 1.0 Check tolerance cm3/1000s. : + 4.0 Spreed Tolerance cm3/1000 strokes : 5.0 Check tolerance cm3/1000 strokes : 9.0 CONTROL LEVER control lever position degree : 120.0	Rated speed rpm : 1000 rack travel mm : 13.85 Tolerance mm : + 0.05 Rated speed rpm : 650 rack travel mm : 13.30 Tolerance mm : + 0.20 Rated speed rpm : 1100 rack travel mm : 13.50 Tolerance mm : + 0.10 ANEROID/ALTITUDE COMPENSATOR TEST SETTING Rated speed rpm : 1000

Pressure hPa Rated speed rpm rack travel mm Tolerance mm	1000 9.40 + 0.20	
Rated speed rpm	: 1000	
Pressure hPa rack travel mm Tolerance mm	: 765 : 13.30 : +- 0.20	
Pressure hPa rack travel mm Tolerance mm	: 325 : 10.65 : + 0.05	
START CUT-OUT		
Rated speed rpm Rated speed rpm	: > 100 : < 290	
Check speed 1/min Check	: > 80	
speed 1/min	: < 300	
Aneroid pressure hPa Rated speed rpm Del. quantity		
cm3/1000 strokes Tolerance	: 208.0	
cm3/1000 strokes Check tolerance	: +- 3.0	
cm3/1000s. Spreed	: + 6.0	
Tolerance cm3/1000 strokes	: 8.0	
Tolerance	: 8.0 : 12.0	
Tolerance cm3/1000 strokes Check tolerance cm3/1000s. Aneroid pressure hPa	: 12.0	
Tolerance cm3/1000 strokes Check tolerance cm3/1000s. Aneroid pressure	: 12.0	
Tolerance cm3/1000 strokes Check tolerance cm3/1000s. Aneroid pressure hPa Rated speed rpm Del. quantity	: 12.0 : : 1000	

Rated speed rpm : 1165
Tolerance 1/min : +- 15

STARTING FUEL DELIVERY

Rated speed rpm : 100
rack travel mm : 12.50
Tolerance mm : + 0.50
Del. quantity
cm3/1000 strokes : 200.0
Tolerance
cm3/1000 strokes : + 20.0
Check tolerance
cm3/1000s. : + 25.0

LOW IDLE

Del. quantity cm3/1000 strokes : 25.0 Tolerance cm3/1000 strokes : + 3.0 Check tolerance cm3/1000s. : + 5.0 Spreed Tolerance cm3/1000 strokes : 8.0 Check tolerance cm3/1000s. : 12.0

End of test specification sheet

Rack travel in mm: 12.40

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

Edition : 11.03.96 Test oil : ISO 4113

Combination No. : 0 402 736 873

Injection pump

Pump designation : PES6P12OA12ORS7265 EP type number : 0 412 726 924

Governor

Governer design. : RQV350...1100PA1178K

Governer no. : 0 421 815 444

Cust. part No. : 3928152

Customer—spec. information Customer : CDC Motor : 6CTA-A Power KW : 167.0

TEST BENCH REQUIREMENTS

Inlet line : 3.2

Test oil inlet

temp. °C : 40
Tolerance °C : + 2.0

Overflow valve : 2 417 413 086

Inlet press. bar : 2.0
Tolerance bar : + 0.1

Test nozzle holde

assembly : 1 688 901 103

Opening pressure

bar : 208.5 Tolerance bar : + 1.5

Test lines : 1 680 750 015

Outside diameter : 6.0

x inside diameter: 3.0

x length mm : 600

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant.

per values _____

BEGINNING OF DELIVERY

Test pressure bar : 17.0 Tolerance bar : + 1.0

Prestroke mm : 4.00
Tolerance mm : + 0.05
Check

tolerance mm : +- 0.10

Rack travel in mm : 10.50 Tolerance mm : + 1.50

Firing order : 1-5-3-6-2-

: 4

Phasing : 0-60-120-180-240

: -300 Tolerance : +- 0.30

Check

tolerance °NW : +- 0.75

Start of delivery blocking

*NW after s.o.d. : 5.25 Tolerance : + 0.50

Check

tolerance °NW : + 0.75

Barrel no. : 1

BASIC SETTING

Rated speed rpm : 1100

Rack travel in mm : 13.25
Tolerance mm : + 0.05

Del. quantity cm3/1000 strokes	. 100 N	t
	. 177.0	FULL LOAD DELIVERY AT FULL LOAD STOP
Tolerance cm3/1000 strokes	: +- 1.0	Rated speed rpm : 1100
Check tolerance		+ Aneroid pressure + hPa : 1200
cm3/1000s.	: +- 4.0	t Del. quantity cm3/1000 strokes : 199.0
Spreed Tolerance		Tolerance cm3/1000 strokes : +- 1.0
cm3/1000 strokes	: 5.0	+ Check tolerance + cm3/1000s. : +- 4.0
Check tolerance cm3/1000S.	: 9.0	+ Spreed + Tolerance
Del. quantity		the cm3/1000 strokes : 5.0 Check tolerance
cm3/1000 strokes Tolerance	: 22.0	+ cm3/1000s. : 9.0
cm3/1000 strokes Check tolerance	: +- 3.0	
cm3/1000s. Spreed	: + 5.0	+ CONTROL LEVER
Tolerance		+ control lever
cm3/1000 strokes	: 8.0	+ position degree : 115.0
Check tolerance cm3/1000s.	; 12.0	tolerance degree : +- 6.0
CMS/ (2005.	, 12.0	RATED SPEED
(B) SETTING OF IN	JJECTTON PUMP	T + rack travel mm : 11.90
WITH GOVERNOR		Rated speed rpm : 1265
		Tolerance 1/min : + 15
GUIDE SLEEVE TRAV	/EL	rack travel mm : 4.00 Rated speed rpm : 1385
Rated speed rpm guide sleeve	: 350	Tolerance 1/min : + 5
travel mm	: 2.11	rack travel mm : 0.50
Tolerance mm	: + 0.20	Tolerance mm : + 0.50
Rated speed rpm	: 1159	Rated speed rpm : 1450
guide sleeve travel mm	: 7.79	
Tolerance mm	: + 0.15	LOW IDLE
Rated speed rpm guide sleeve	: 726	control lever
travel mm	: 4.80	position degree : 70.0
Tolerance mm	: + 0.20	tolerance degree : +- 6.0
Rated speed rpm guide sleeve	: 420	Testing:
travel mm	: 3.10	Rated speed rpm : 350
Tolerance mm	: +- 0.25	rack travel mm : 6.40 Tolerance mm : + 0.20
Rated speed rpm guide sleeve	: 1640	Rated speed rpm : 275
travel mm	: 13.50	
Tolerance mm	: +- 0.50	CRT mm min. : > 7.90

Rated speed rpm	: 425	+ Rated speed rpm : 650 Del. quantity
TORQUE CONTROL		cm3/1000 strokes : 188.0 Tolerance
Rated speed rpm rack travel mm Tolerance mm	: 13.25	- cm3/1000 strokes : +- 3.0 - Check tolerance - cm3/1000s. : +- 6.0 - Spreed
Rated speed rpm rack travel mm Tolerance mm	: 650	Tolerance : 8.0 Check tolerance
Rated speed rpm	: 1200	cm3/1000s. : 12.0 Aneroid pressure
rack travel mm Tolerance mm	: +- 0.10	<pre>+ hPa : - Rated speed rpm : 1100 Del. quantity</pre>
ANEROID/ALTITUDE COMPENSATOR TEST		- cm3/1000 strokes : 88.0 - Tolerance - cm3/1000 strokes : + 1.0
SETTING		+ Check tolerance cm3/1000S. : + 3.0
Rated speed rpm Pressure hPa	: 1100 : 1200	BREAKAWAY
MEASUREMENT		Rack travel in mm: 11.90 Rated speed rpm: 1265
Pressure hPa Rated speed rpm rack travel mm Tolerance mm	: 1100 : 8.70	Tolerance 1/min : + 15
Rated speed rpm		STARTING FUEL DELIVERY
Pressure hPa rack travel mm Tolerance mm	: 520 : 11.80	Rated speed rpm : 100 rack travel mm : 12.50 Tolerance mm : + 0.50 Del. quantity
Pressure hPa rack travel mm Tolerance mm	: 255 : 9.75 : + 0.05	- cm3/1000 strokes : 215.0 - Tolerance - cm3/1000 strokes : + 20.0 - Check tolerance
START CUT-OUT		+ cm3/1000s. : +- 25.0
	. > 400	Ŧ
Rated speed rpm Rated speed rpm		LOW IDLE
Check speed 1/min Check	: > 80	Del. quantity + cm3/1000 strokes : 22.0 + Tolerance
speed 1/min	: < 300	+ cm3/1000 strokes : + 3.0 + Check tolerance
FUEL DELIVERY CHAI	RACTERISTICS	+ cm3/1000s. : +- 5.0 + Spreed + Tolerance
Aneroid pressure hPa	: 1200	cm3/1000 strokes : 8.0

cm3/1000s.	;	12.0	

Note remarks

Refer to Service Info for test and adjustment instructions.
See microcard(s) W400/...

Edition : 11.03.96 Test oil : ISO 4113

Combination No. : 0 402 736 905

Injection pump

Pump designation : PES6P12OA12ORS7416 EP type number : 0 412 726 959

Governor

Governer design. : RQV400...1250PA1160

: -3K

Governer no. : 0 421 815 513

Cust. part No. : 3928145

Customer-spec. information
Customer : CDC
Motor : 6BTA-A
Power KW : 119.0

TEST BENCH REQUIREMENTS

Inlet line : 3.2

Test oil inlet

temp. °C : 40
Tolerance °C : +- 2.0

Overflow valve : 2 417 413 086

Inlet press. bar : 2.0 Tolerance bar : + 0.1

Test nozzle holde

assembly : 1 688 901 103

Opening pressure

bar : 208.5 Tolerance bar : + 1.5

Test lines : 1 680 750 015

Outside diameter : 6.0

x inside diameter: 3.0 x length mm : 600

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant.

per values ____

BEGINNING OF DELIVERY

Test pressure bar : 17.0 Tolerance bar : + 1.0

Prestroke mm : 3.60
Tolerance mm : + 0.05
Check
tolerance mm : + 0.10

2010 400 500

Rack travel in mm : 10.50 Tolerance mm : + 1.50

Firing order : 1-5-3-6-2-

Phasing : 0-60-120-180-240 : -300

Tolerance : + 0.30

Check

tolerance *NW : +- 0.75

Start of delivery blocking

*NW after s.o.d. : 6.25 Tolerance : + 0.50

Check

tolerance *NW : + 0.75

Barrel no. : 1

BASIC SETTING

Rated speed rpm : 1250

Rack travel in mm : 13.35
Tolerance mm : + 0.05

Del. quantity cm3/1000 strokes : 153.5	
	FULL LOAD DELIVERY AT FULL LOAD STOP
Tolerance cm3/1000 strokes : +- 1.0	Rated speed rpm : 1250 Aneroid pressure
Check tolerance cm3/1000s. : + 4.0	hPa : 1200 Del. quantity
Spreed	cm3/1000 strokes : 153.5 Tolerance
Tolerance cm3/1000 strokes : 8.0	cm3/1000 strokes : + 1.0 Check tolerance cm3/1000s. : + 4.0
Check tolerance cm3/1000s. : 12.0	Spreed Tolerance
Del. quantity	cm3/1000 strokes : 8.0 Check tolerance
cm3/1000 strokes : 15.5	cm3/1000s. : 12.0
cm3/1000 strokes : + 3.0 - Check tolerance	
cm3/1000s. : +- 5.0 Spreed	CONTROL LEVER
Tolerance cm3/1000 strokes : 4.0	control lever position degree : 117.0
Check tolerance - cm3/1000s. : 8.0 -	tolerance degree : +- 6.0
	RATED SPEED
(B) SETTING OF INJECTION PUMP WITH GOVERNOR -	rack travel mm : 12.30 Rated speed rpm : 1325 Tolerance 1/min : + 15
GUIDE SLEEVE TRAVEL	rack travel mm : 4.00
Rated speed rpm : 400 - guide sleeve -	Rated speed rpm : 1480 Tolerance 1/min : +- 5
travel mm : 1.44 -	rack travel mm : 0.50
Tolerance mm : +- 0.20	Tolerance mm : + 0.50 Rated speed rpm : 1550
Rated speed rpm : 1329 guide sleeve	
travel mm : 7.83 - Tolerance mm : + 0.15 -	LOW IDLE
Rated speed rpm : 939 - guide sleeve	control lever
travel mm : 5.18	position degree : 71.0
Tolerance mm : +- 0.25	tolerance degree : + 6.0
Rated speed rpm : 640 - guide sleeve -	Testing:
travel mm : 3.56 - Toleranc⇒ mm : + 0.25 -	Rated speed rpm : 420 rack travel mm : 6.00 Tolerance mm : +- 0.20
Rated speed rpm : 1690	Rated speed rpm : 400
travel mm : 11.50 - Tolerance mm : + 0.50 -	CRT mm min. : > 5.80
	-

Rated speed rpm	: 425	†
TORQUE CONTROL		FUEL DELIVERY CHARACTERISTICS
TORGOL CONTROL		Aneroid pressure
Rated speed rpm	: 1250	+ hPa : 1200
rack travel mm		Rated speed rpm : 800
Tolerance mm	: + 0.05	Del. quantity
. Occi di loc ilali		+ cm3/1000 strokes : 133.0
Rated speed rpm	• 800	+ Tolerance
rack travel mm		+ cm3/1000 strokes : +- 3.0
Tolerance mm		+ Check tolerance
total dura itti	. 1- 0.20	+ cm3/1000s. : +- 6.0
Dated speed app	: 500	
Rated speed rpm		+ Spreed
rack travel mm Tolerance mm	: 11.60	† Tolerance
Tolerance mm	: ← 0.20	+ cm3/1000 strokes : 8.0
		+ Check tolerance
Rated speed rpm	: 900	+ cm3/1000s. : 12.0
rack travel mm	: 12.40	+
Tolerance mm	: + 0.20	+ Aneroid pressure
		+ hPa : -
		Rated speed rpm : 1250
ANEROID/ALTITUDE		+ Del. quantity
COMPENSATOR TEST		+ cm3/1000 strokes : 106.0
JOHN ENDATION 1201		Tolerance
		- cm3/1000 strokes : +- 1.0
CETTING		
SETTING		+ Check tolerance
	4050	+ cm3/1000s. : +- 3.0
Rated speed rpm	: 1250	†
Pressure hPa	: 1200	
		+ BREAKAWAY
MEASUREMENT		+
		+
Pressure hPa	: -	+ Rack travel in mm : 12.30
Rated speed rpm	: 1250	+ Rated speed rpm : 1325
rack travel mm	: 10.40	+ Tolerance 1/min : +- 15
Tolerance mm		+
TOTAL CONTRACTOR		1
Rated speed rpm	: 1250	
		+ STARTING FUEL DELIVERY
Pressure hPa	: 350	+
rack travel mm	: 12.70	+ Rated speed rpm : 100
Tolerance mm		rack travel mm : 13.50
	. ••••	+ Tolerance mm : + 0.50
Pressure hPa	: 265	+ Del. quantity
rack travel mm		cm3/1000 strokes : 155.0
Tolerance mm		+ Tolerance
roterance mm	0.20	+ cm3/1000 strokes : + 20.0
		Check tolerance
START CUT-OUT		+ cm3/1000s. : + 25.0
		†
Rated speed rpm		†
Rated speed rpm	: < 280	†
		+
Check		+ LOW IDLE
speed 1/min	: > 80	+
Check		+ Del. quantity
speed 1/min	: < 290	+ cm3/1000 strokes : 15.5
		+ Tolerance
		cm3/1000 strokes : + 3.0
		T CHID 1000 311 0/63 . +- 3.0

Check tolerance cm3/1000S. Spreed	; +-	5.0
Tolerance cm3/1000 strokes	;	4.0
Check tolerance cm3/1000s.	:	8.0

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

Edition : 08.03.96 Test oil : ISO 4113

Combination No. : 0 402 776 822

Injection pump

Pump designation : PES6P120A720RS7382

EP type number : 0 412 726 943

Governor

Governer design. : RSV400...900P4A608

Governer no. : 0 421 833 493

Cust. part No. : RE64214

Customer-spec. information

Customer : DEERE : 6081 AF001 Motor

Power KW : 180.0

TEST BENCH REQUIREMENTS

Inlet line : 4.2

Test oil inlet

temp. °C Tolerance °C 2.0

Overflow valve : 2 417 413 079

Inlet press. bar : 2.0

Test nozzle holde

: 1 688 901 101 assembly

Opening pressure

208.5 : + 1.5 Tolerance bar

Test lines : 1 680 750 015

Outside diameter : 6.0

x inside diameter: 3.0 x length mm : 600

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant.

per values

BEGINNING OF DELIVERY

Test pressure bar : 17.0 Tolerance bar : + 1.0

Prestroke mm : 3.60 Tolerance mm : + 0.05 Check

tolerance mm : \leftarrow 0.10

Rack travel in mm : 10.50 Tolerance mm : + 1.50

: 1-5-3-6-2-Firing order

Phasing : 0-60-120-180-240

: -300

Tolerance : + - 0.30

Check

tolerance *NW : +- 0.75

Start of delivery blocking

*NW after s.o.d. : 7.00 Tolerance : +- 0.50

Check

tolerance °NW : + 0.75

Barrel no. : 1

Beginning of delivery differende

and maximum rack

14.00 travel Difference * CS : 2.50

BASIC SETTING

	+ Check tolerance
Rack travel in mm : 12.85 Tolerance mm : + 0.05	cm3/1000s. : 9.0
Del. quantity cm3/1000 strokes : 229.0	CONTROL LEVER
Tolerance cm3/1000 strokes : + 1.0	+ control lever + position degree : 103.0 + tolerance degree : + 4.0
Check tolerance cm3/1000S. : +- 4.0	RATED SPEED
Spreed -	rack travel mm : 11.85 Rated speed rpm : 920 Tolerance 1/min : +- 5
cm3/1000 strokes : 5.0	rack travel mm : 4.00
Check tolerance cm3/1000s. : 9.0	Rated speed rpm : 955 Tolerance 1/min : +- 5
Del. quantity - cm3/1000 strokes : 20.0 - Tolerance -	rack travel mm : 0.85 Tolerance mm : + 0.55 Rated speed rpm : 1025
cm3/1000 strokes : +- 3.0 - Check tolerance	rack travel mm : 4.00
cm3/1000s. : +- 5.0 Spreed Tolerance	Rated speed rpm : 970
cm3/1000 strokes : 8.0 -	LOW IDLE
Check tolerance cm3/1000s. : 12.0	LOW IVEC
	control lever position degree : 79.0 tolerance degree : + 4.0
cm3/1000s. : 12.0 (B) SETTING OF INJECTION PUMP WITH GOVERNOR	control lever position degree : 79.0 tolerance degree : + 4.0 Setting point w/out bumper spring
cm3/1000s. : 12.0 (B) SETTING OF INJECTION PUMP WITH GOVERNOR GUIDE SLEEVE POSITION	control lever position degree : 79.0 tolerance degree : + 4.0
cm3/1000s. : 12.0 (B) SETTING OF INJECTION PUMP WITH GOVERNOR GUIDE SLEEVE POSITION governor spring pre-tension	control lever position degree : 79.0 tolerance degree : + 4.0 Setting point w/out bumper spring Rated speed rpm : 400
cm3/1000s. : 12.0 (B) SETTING OF INJECTION PUMP WITH GOVERNOR GUIDE SLEEVE POSITION governor spring	control lever position degree : 79.0 tolerance degree : + 4.0 Setting point w/out bumper spring Rated speed rpm : 400 rack travel mm : 5.00 Testing: Rated speed rpm : 400
Cm3/1000s. : 12.0 (B) SETTING OF INJECTION PUMP WITH GOVERNOR GUIDE SLEEVE POSITION governor spring pre-tension click setting x : 5.00 FULL LOAD DELIVERY AT FULL LOAD STOP	control lever position degree : 79.0 tolerance degree : + 4.0 Setting point w/out bumper spring Rated speed rpm : 400 rack travel mm : 5.00 Testing:
cm3/1000s. : 12.0 (B) SETTING OF INJECTION PUMP WITH GOVERNOR GUIDE SLEEVE POSITION governor spring pre-tension click setting x : 5.00 FULL LOAD DELIVERY AT FULL LOAD STOP Rated speed rpm : 850 Aneroid pressure	control lever position degree : 79.0 tolerance degree : + 4.0 Setting point w/out bumper spring Rated speed rpm : 400 rack travel mm : 5.00 Testing: Rated speed rpm : 400 rack travel mm : 5.50
Cm3/1000s. : 12.0 (B) SETTING OF INJECTION PUMP WITH GOVERNOR GUIDE SLEEVE POSITION governor spring pre-tension click setting x : 5.00 FULL LOAD DELIVERY AT FULL LOAD STOP Rated speed rpm : 850 Aneroid pressure hPa : - Del. quantity	control lever position degree : 79.0 tolerance degree : + 4.0 Setting point w/out bumper spring Rated speed rpm : 400 rack travel mm : 5.00 Testing: Rated speed rpm : 400 rack travel mm : 5.50 Tolerance mm : 5.50 ToRQUE CONTROL Rated speed rpm : 850
Cm3/1000s. : 12.0 (B) SETTING OF INJECTION PUMP WITH GOVERNOR GUIDE SLEEVE POSITION governor spring pre-tension click setting x : 5.00 FULL LOAD DELIVERY AT FULL LOAD STOP Rated speed rpm : 850 Aneroid pressure hPa : - Del. quantity cm3/1000 strokes : 229.0 Tolerance	control lever position degree : 79.0 tolerance degree : + 4.0 Setting point w/out bumper spring Rated speed rpm : 400 rack travel mm : 5.00 Testing: Rated speed rpm : 400 rack travel mm : 5.50 Tolerance mm : 5.50 TORQUE CONTROL
Cm3/1000s. : 12.0 (B) SETTING OF INJECTION PUMP WITH GOVERNOR GUIDE SLEEVE POSITION governor spring pre-tension click setting x : 5.00 FULL LOAD DELIVERY AT FULL LOAD STOP Rated speed rpm : 850 Aneroid pressure hPa : - Del. quantity cm3/1000 strokes : 229.0 Tolerance cm3/1000 strokes : + 1.0 Check tolerance	control lever position degree : 79.0 tolerance degree : + 4.0 Setting point w/out bumper spring Rated speed rpm : 400 rack travel mm : 5.00 Testing: Rated speed rpm : 400 rack travel mm : 5.50 Tolerance mm : + 0.10 TORQUE CONTROL Rated speed rpm : 850 rack travel mm : 12.85
Cm3/1000s. : 12.0 (B) SETTING OF INJECTION PUMP WITH GOVERNOR GUIDE SLEEVE POSITION governor spring pre-tension click setting x : 5.00 FULL LOAD DELIVERY AT FULL LOAD STOP Rated speed rpm : 850 Aneroid pressure hPa : - Del. quantity cm3/1000 strokes : 229.0 Tolerance cm3/1000 strokes : +- 1.0	control lever position degree : 79.0 tolerance degree : + 4.0 Setting point w/out bumper spring Rated speed rpm : 400 rack travel mm : 5.00 Testing: Rated speed rpm : 400 rack travel mm : 5.50 Tolerance mm : + 0.10 TORQUE CONTROL Rated speed rpm : 850 rack travel mm : 12.85

Check speed 1/min :> 80 **BREAKAWAY** Rack travel in mm: 11.85 Rated speed rpm : 920
Tolerance 1/min : +-STARTING FUEL DELIVERY Rated speed rpm 100 20.50 rack travel mm : +- 0.50 Tolerance mm Del. quantity cm3/1000 strokes : 105.0 Tolerance cm3/1000 strokes : +- 20.0 Check tolerance cm3/1000s. : +- 25.0 LOW IDLE Del. quantity cm3/1000 strokes : 20.0 Tolerance cm3/1000 strokes : +-3.0 Check tolerance cm3/1000s. 5.0 Spreed Tolerance cm3/1000 strokes : 8.0 Check tolerance cm3/1000s. 12.0

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

Edition : 07.03.96 Test oil : ISO 4113

Combination No. : 0 402 776 823

Injection pump

Pump designation : PES6P120A720RS7382

EP type number : 0 412 726 943

Governor

Governer design. : RSV400...900P4A609

Governer no. : 0 421 833 494

Cust. part No. : RE64162

Customer-spec. information

Customer : DEERE : 6081 AF001

Power KW : 180.0

TEST BENCH REQUIREMENTS

Inlet line : 4.2

Test oil inlet

temp. °C : 40
Tolerance °C : + 2.0

Overflow valve : 2 417 413 079

Inlet press. bar : 2.0

Test nozzle holde

assembly : 1 688 901 101

Opening pressure

bar : 208.5 Tolerance bar : + 1.5

Test Lines : 1 680 750 015

Outside diameter : 6.0

x inside diameter: 3.0 x length mm : 600

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant.

per values _____

BEGINNING OF DELIVERY

Test pressure bar : 17.0 Tolerance bar : + 1.0

Prestroke mm : 3.60
Tolerance mm : + 0.05

Check

tolerance mm : +- 0.10

Rack travel in mm : 10.50 Tolerance mm : + 1.50

Firing order : 1-5-3-6-2-

: 4

Phasing : 0-60-120-180-240

: -300

Tolerance : + 0.30

Check

tolerance °NW : + 0.75

Start of delivery blocking

 $^{\circ}$ NW after s.o.d. : 7.00 Tolerance : \leftarrow 0.50

Check

tolerance °NN : +- 0.75

Barrel no. : 1

Beginning of delivery differende

and maximum rack

travel : 14.00 Difference ° CS : 2.50

BASIC SETTING

Rated speed rpm : 850	Tolerance : 5.0
Rack travel in mm: 12.85 Tolerance mm: + 0.05	Check tolerance cm3/1000s. : 9.0
Del. quantity cm3/1000 strokes : 229.0	CONTROL LEVER
Tolerance cm3/1000 strokes : + 1.0	control lever position degree : 103.0 tolerance degree : +- 4.0
Check tolerance cm3/1000S. : ← 4.0	RATED SPEED
Spreed Tolerance cm3/1000 strokes : 5.0	rack travel mm : 11.85 Rated speed rpm : 920 Tolerance 1/min : +- 5
Check tolerance cm3/1000S. : 9.0	rack travel mm : 4.00 Rated speed rpm : 955 Tolerance 1/min : +- 5
Del. quantity cm3/1000 strokes : 20.0 Tolerance	rack travel mm : 0.85 Tolerance mm : + 0.55
cm3/1000 strokes : + 3.0 + Check tolerance cm3/1000s. : + 5.0 +	Rated speed rpm : 1025 rack travel mm : 4.00
Spreed + Tolerance + cm3/1000 strokes : 8.0 +	Rated speed rpm : 970
Check tolerance cm3/1000s. : 12.0	LOW IDLE
(B) SETTING OF INJECTION PUMP WITH GOVERNOR	control lever position degree : 79.0 tolerance degree : +- 4.0
GUIDE SLEEVE POSITION	Setting point w/out bumper spring
governor spring + pre-tension +	Rated speed rpm : 400 rack travel mm : 5.00
click setting x : 5.00	Testing:
FULL LOAD DELIVERY AT FULL LOAD STOP	Rated speed rpm : 400 rack travel mm : 5.50 Tolerance mm : +- 0.10
Rated speed rpm : 850 Aneroid pressure	Rated speed rpm : 100
hPa : - + Del. quantity cm3/1000 strokes : 229.0 +	CRT mm min. : > 19.00
Tolerance + 1.0 + Check tolerance + + + + + + + + + + + + + + + + + + +	TORQUE CONTROL
cm3/1000s. : +- 4.0 Spreed	Rated speed rpm : 850 rack travel mm : 12.85 Tolerance mm : +- 0.05

START CUT-OUT 100 Rated speed rpm : > Check speed 1/min ; > 80 **BREAKAWAY** Rack travel in mm: 11.85 Rated speed rpm : Tolerance 1/min : +-STARTING FUEL DELIVERY 100 Rated speed rpm 20.50 rack travel mm : +- 0.50 Tolerance mm Del. quantity cm3/1000 strokes : 105.0 Tolerance cm3/1000 strokes : +- 20.0Check tolerance cm3/1000s. : +- 25.0 LOW IDLE Del. quantity cm3/1000 strokes : 20.0 Tolerance cm3/1000 strokes : +-3.0 Check tolerance cm3/1000s. 5.0 Spreed Tolerance 8.0 cm3/1000 strokes : Check tolerance cm3/1000s. 12.0 End of test specification sheet

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

Edition : 07,03,96 : ISO 4113 Test oil

Combination No. : 0 402 776 832

Injection pump

Pump designation : PES6P120A720RS7382

EP type number : 0 412 726 943

Governor

Governer design. : RSV400...750P4A609

: 0 421 833 518 Governer no.

Cust. part No. : RE66450

Customer-spec. information Customer : DEERE

: 6081 AF001 Motor : 150.0 Power KW

TEST BENCH REQUIREMENTS

Inlet line : 4.2

Test oil inlet

temp. °C 40 Tolerance °C : +- 2.0

Overflow valve : 2 417 413 079

Inlet press. bar : 2.0

Test nozzle holde

assembly : 1 688 901 101

Opening pressure

208.5 bar Tolerance bar : + 1.5

Test lines : 1 680 750 015

Outside diameter : 6.0

x inside diameter: 3.0 x length mm : 600

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant.

per values ____

BEGINNING OF DELIVERY

Test pressure bar: 17.0 Tolerance bar : + 1.0

Prestroke mm : 3.60 Tolerance mm : + 0.05 Check

tolerance mm : \leftarrow 0.10

Rack travel in mm: 10.50 Tolerance mm : + 1.50

: 1-5-3-6-2-Firing order

: 4

Phasing : 0-60-120-180-240

: -300

Tolerance : +- 0.30

Check

tolerance *NW : +- 0.75

Start of delivery blocking

*NW after s.o.d. : 7.00

Tolerance : \leftarrow 0.50 Check

tolerance *NW : + 0.75

Barrel no. : 1

Beginning of delivery differende

and maximum rack

14.00 travel Difference ° CS : 2.50

BASIC SETTING

4	- Check tolerance
Rack travel in mm : 12.90 - Tolerance mm : +- 0.05	- cm3/1000s. : +- 4.0 - Spreed - Tolerance
Dal gumada.	- cm3/1000 strokes : 5.0
Del. quantity cm3/1000 strokes : 223.0	- Check tolerance - cm3/1000s. : 9.0
Tolerance cm3/1000 strokes : +- 1.0	CONTROL LEVER
Check tolerance	- CONTROL LEVER - control lever
Spreed	position degree : 91.0 tolerance degree : + 4.0
Tolerance cm3/1000 strokes : 5.0	- RATED SPEED
Check tolerance cm3/1000s. 9.0	rack travel mm : 11.90 Rated speed rpm : 760 Tolerance 1/min : +- 5
Del. quantity + cm3/1000 strokes : 26.5 + Tolerance + Cm3/1000 strokes : 26.5	- - rack travel mm : 4.00 - Rated speed rpm : 790
cm3/1000 strokes : +- 3.0 Check tolerance	Tolerance 1/min : + 5
cm3/1000s. : +- 5.0	rack travel mm : 0.85 Tolerance mm : +- 0.55
Tolerance + cm3/1000 strokes : 8.0 +	Rated speed rpm : 900
Check tolerance cm3/1000s. : 12.0	rack travel mm : 4.00 Rated speed rpm : 820
(B) SETTING OF INJECTION PUMP	
WITH GOVERNOR	· LOW IDLE
GUIDE SLEEVE POSITION	control lever position degree : 74.0 tolerance degree : + 4.0
Rated speed rpm : 800	Setting point w/out bumper spring
Rack travel in mm: 0.50	
Tolerance mm : +- 0.20	Rated speed rpm : 400 rack travel mm : 5.30
governor spring pre-tension click setting x : 4.00	Testing:
T 4.00	Rated speed rpm : 400
FULL LOAD DELIVERY AT FULL LOAD STOP	rack travel mm : 5.80 Tolerance mm : + 0.10
Rated speed rpm : 700 Aneroid pressure	Rated speed rpm : 100
hPa : - +	CRT mm min. : > 19.00
Del. quantity + cm3/1000 strokes : 223.0 +	
Tolerance + 1.0 +	TORQUE CONTROL
Time structures in the Time Time Time Time Time Time Time Tim	

Rated speed rpm rack travel mm Tolerance mm	:	+	700 12.90 0.05	
START CUT-OUT				
Rated speed rpm	:	>	100	
Check speed 1/min	:	>	80	
BREAKAWAY				
Rack travel in mm Rated speed rpm Tolerance 1/min		+	11.90 760 5	
STARTING FUEL DEL	IV	ERY		
Rated speed rpm rack travel mm Tolerance mm Del. quantity	:	+-	100 20.50 0.50	
cm3/1000 strokes Tolerance cm3/1000 strokes			105.0	
Check tolerance cm3/1000s.	:		25.0	
LOW IDLE				
	:		26.5	
Tolerance cm3/1000 strokes	:	+-	3.0	
Check tolerance cm3/1000S. Spreed	:	+	5.0	
Tolerance cm3/1000 strokes	:		8.0	
Check tolerance cm3/1000s.	:		12.0	

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

: 07.03.96 Edition : ISO 4113 Test oil

Combination No. : 0 402 776 833

Injection pump

Pump designation : PES6P120A720RS7382

EP type number : 0 412 726 943

Governor

Governer design. : RSV400...750P4A608

: -1

: 0 421 833 519 Governer no.

Cust. part No. : RE66457

Customer-spec. information Customer : DEERE

: 6081 AF001 Motor : 150.0 Power KW

TEST BENCH REQUIREMENTS

Inlet line : 4.2

Test oil inlet

temp. °C 40 Tolerance °C : +- 2.0

Overflow valve : 2 417 413 D79

Inlet press. bar : 2.0

Test nozzle holde

: 1 688 901 101 assembly

Opening pressure

208.5 Tolerance bar : +- 1.5

Test Lines : 1 680 750 015

Outside diameter : 6.0

x inside diameter: 3.0 x length mm : 600

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant.

per values _____

BEGINNING OF DELIVERY

Test pressure bar: 17.0 Tolerance bar : +- 1.0

Prestroke mm : 3.60 Tolerance mm

Check

tolerance mm : +- 0.10

Rack travel in mm: 10.50 Tolerance mm : + 1.50

: 1-5-3-6-2-Firing order

: 0-60-120-180-240 Phasing

: -300

Tolerance : +- 0.30

Check

: **←** 0.75 tolerance °NW

Start of delivery blocking

°NW after s.o.d. : 7.00

Tolerance : +- 0.50 Check

tolerance *NW : + 0.75

Barrel no. : 1

Beginning of delivery differende

and maximum rack

14.00 travel Difference ° CS : 2.50

BASIC SETTING

Rack travel in mm: 12.90 Tolerance mm: + 0.05 Del. quantity cm3/1000 strokes: 223.0	Check tolerance cm3/1000s. : + 4.0 Spreed Tolerance cm3/1000 strokes : 5.0 Check tolerance cm3/1000s. : 9.0
Tolerance	
Check tolerance cm3/1000s. : + 4.0	CONTROL LEVER
Spreed Tolerance	position degree : 91.0 tolerance degree : + 4.0
cm3/1000 strokes : 5.0	RATED SPEED
Check tolerance cm3/1000s. 9.0	rack travel mm : 11.90 Rated speed rpm : 760 Tolerance 1/min : +- 5
Del. quantity cm3/1000 strokes : 26.5 Tolerance	rack travel mm : 4.00 Rated speed rpm : 790
cm3/1000 strokes : + 3.0 + Check tolerance	Tolerance 1/min : + 5
cm3/1000s. : +- 5.0 + Spreed +-	rack travel mm : 0.85 Tolerance mm : + 0.55 Rated speed rpm : 900
cm3/1000 strokes : 8.0 + Check tolerance	rack travel mm : 4.00
cm3/1000s. : 12.0	Rated speed rpm : 820
(B) SETTING OF INJECTION PUMP WITH GOVERNOR	LOW IDLE
GUIDE SLEEVE POSITION	<pre>control lever position degree : 74.0 tolerance degree : + 4.0</pre>
Rated speed rpm : 800	Setting point w/out bumper spring
Rack travel in mm: 0.50 Tolerance mm: + 0.20	Rated speed rpm : 400 rack travel mm : 5.30
governor spring pre-tension click setting x : 4.00	Testing:
	Rated speed rpm : 400 rack travel mm : 5.80
FULL LOAD DELIVERY AT FULL LOAD STOP	Tolerance mm : + 0.10
Rated speed rpm : 700 Aneroid pressure	Rated speed rpm : 100
hPa : - + Del. quantity	CRT mm min. : > 19.00
cm3/1000 strokes : 223.0	TORQUE CONTROL
cm3/1000 strokes : +- 1.0 +	

Rated speed rpm : 700 12.90 rack travel mm : Tolerance mm : **←** 0.05 START CUT-OUT 100 Rated speed rpm : > Check speed 1/min ; > 80 BREAKAWAY 11.90 Rack travel in mm : Rated speed rpm : 760 Tolerance 1/min : +-STARTING FUEL DELIVERY Rated speed rpm 100 20.50 rack travel mm : : +- 0.50 Tolerance mm Del. quantity cm3/1000 strokes : 105.0 Tolerance cm3/1000 strokes : +- 20.0Check tolerance cm3/1000s. : +- 25.0 LOW IDLE Del. quantity cm3/1000 strokes : 26.5 Tolerance cm3/1000 strokes : +-3.0 Check tolerance 5.0 cm3/1000s. Spreed Tolerance 8.0 cm3/1000 strokes : Check tolerance 12.0 cm3/1000s.

Note remarks

Refer to Service Info for test and adjustment instructions.
See microcard(s) W400/...

Edition : 07.03.96 Test oil : ISO 4113

Combination No. : 0 400 074 089

Injection pump

Pump designation : PES4M55C32ORS175 EP type number : 0 410 054 957

Governor

Governer design. : RSV350...1500M0C353

: -10

Governer no. : 0 420 033 046

Cust, part No. :

Customer-spec. information Customer : MB-NFZ

Motor : 0M601 (2,3L)

Power KW : 44.0

TEST BENCH REQUIREMENTS

Test oil inlet

temp. °C : 40
Tolerance °C : + 2.0

Overflow valve : 1 469 990 351

Inlet press. bar : 1.0

Test nozzle holde

assembly : 1 688 901 111

Opening pressure

bar : 148.5 Tolerance bar : +- 1.5

Test lines : 1 680 750 014

Outside diameter : 6.0

x inside diameter: 2.0

x length mm : 600

REMARKS

(A) INJECTION PUMP SETTING VALUES Set equal delivery quant.

per values _____

BEGINNING OF DELIVERY

Test pressure bar : 26.0 Tolerance bar : +- 1.0

Prestroke mm : 2.05Tolerance mm : $\leftarrow 0.05$

Check

tolerance mm : + 0.10

Rack travel in mm : 21.00 Tolerance mm : + 1.00

Firing order : 1-3-4-2

Phasing : 0-90-180-270

Start of delivery blocking

*NW after s.o.d. : 15.50 Tolerance : + 0.20

Check

tolerance °NW : +- 0.30

Barrel no. : 1

BASIC SETTING

Rated speed rpm : 1480

Rack travel in mm : 11.75 Tolerance mm : + 0.05

Del. quantity

cm3/1000 strokes : 37.5

Tolerance

cm3/1000 strokes : \leftarrow 0.5

Check tolerance

cm3/1000s. : +- 1.5

Spreed

T-1	
Tolerance + cm3/1000 strokes : 2.5	CDT > 20.40
cms/1000 strokes : 2.5	CRT mm min. : > 20.10
Check tolerance	rack travel mm : 5.40
cm3/1000s. : 3.0	Rated speed rpm : 350
T 3.0	rated speed rpm : 550
Rated speed rpm : 350	SET IDLE AUXILIARY SPRING
Del. quantity	SEL THE MONICIANT SPRING
cm3/1000 strokes : 7.0	rack travel mm : 2.00
Tolerance	I dev clease intil . 5.00
cm3/1000 strokes : + 1.0 +	
Spreed	TORQUE CONTROL
Tolerance	TORGOE CONTINUE
cm3/1000 strokes : 1.0	Rated speed rpm : 1480
	rack travel mm : 11.75
1	rack travel mm : 11.75 Tolerance mm : +- 0.05
(B) SETTING OF INJECTION PUMP	TO COT UTION THAT
WITH GOVERNOR	Rated speed rpm : 1100
1	rack travel mm : 12.60
	rack travel mm : 12.60 Tolerance mm : + 0.10
GUIDE SLEEVE POSITION +	
+	Rated speed rpm : 1350
Rated speed rpm : 800	rack travel mm : 12.20
+	rack travel mm : 12.20 Tolerance mm : + 0.10
Rack travel in mm: 0.65	
Tolerance mm : + 0.35 +	
+	
+	
FULL LOAD DELIVERY AT FULL LOAD STOP +	FUEL DELIVERY CHARACTERISTICS
+	
Rated speed rpm : 1480 +	Ref. pressure
Ref pressure	ALDA / ADA hPa : -
Ref. pressure + ALDA / ADA hPa : - +	ALDA / ADA hPa : - Rated speed rpm : 1100
Ref. pressure ALDA / ADA hPa : - + Del. quantity +	ALDA / ADA hPa : - Rated speed rpm : 1100 Del. quantity
Ref. pressure ALDA / ADA hPa : - + Del. quantity cm3/1000 strokes : 37.5	ALDA / ADA hPa : - Rated speed rpm : 1100 Del. quantity cm3/1000 strokes : 40.7
Ref. pressure ALDA / ADA hPa : - + Del. quantity cm3/1000 strokes : 37.5 Tolerance +	ALDA / ADA hPa : - Rated speed rpm : 1100 Del. quantity cm3/1000 strokes : 40.7 Tolerance
Ref. pressure ALDA / ADA hPa : - Del. quantity cm3/1000 strokes : 37.5 Tolerance cm3/1000 strokes : + 0.5	ALDA / ADA hPa : - Rated speed rpm : 1100 Del. quantity cm3/1000 strokes : 40.7 Tolerance cm3/1000 strokes : +- 1.0
Ref. pressure ALDA / ADA hPa : - Del. quantity cm3/1000 strokes : 37.5 Tolerance cm3/1000 strokes : + 0.5 Check tolerance	ALDA / ADA hPa : — Rated speed rpm : 1100 Del. quantity cm3/1000 strokes : 40.7 Tolerance cm3/1000 strokes : + 1.0 Check tolerance
Ref. pressure ALDA / ADA hPa : - Del. quantity cm3/1000 strokes : 37.5 Tolerance cm3/1000 strokes : + 0.5 Check tolerance cm3/1000s. : + 1.5	ALDA / ADA hPa : — Rated speed rpm : 1100 Del. quantity cm3/1000 strokes : 40.7 Tolerance cm3/1000 strokes : + 1.0 Check tolerance cm3/1000s. : + 2.0
Ref. pressure ALDA / ADA hPa : - Del. quantity cm3/1000 strokes : 37.5 Tolerance cm3/1000 strokes : + 0.5 Check tolerance cm3/1000s. : + 1.5 Spreed	ALDA / ADA hPa : — Rated speed rpm : 1100 Del. quantity cm3/1000 strokes : 40.7 Tolerance cm3/1000 strokes : + 1.0 Check tolerance cm3/1000s. : + 2.0 Spreed
Ref. pressure ALDA / ADA hPa : - Del. quantity cm3/1000 strokes : 37.5 Tolerance cm3/1000 strokes : + 0.5 Check tolerance cm3/1000s. : + 1.5 Spreed Tolerance	ALDA / ADA hPa : — Rated speed rpm : 1100 Del. quantity cm3/1000 strokes : 40.7 Tolerance cm3/1000 strokes : + 1.0 Check tolerance cm3/1000s. : + 2.0 Spreed Tolerance
Ref. pressure ALDA / ADA hPa : - Del. quantity cm3/1000 strokes : 37.5 Tolerance cm3/1000 strokes : + 0.5 Check tolerance cm3/1000s. : + 1.5 Spreed Tolerance cm3/1000 strokes : 2.5	ALDA / ADA hPa : — Rated speed rpm : 1100 Del. quantity cm3/1000 strokes : 40.7 Tolerance cm3/1000 strokes : + 1.0 Check tolerance cm3/1000s. : + 2.0 Spreed Tolerance cm3/1000 strokes : 2.5
Ref. pressure ALDA / ADA hPa : - Del. quantity cm3/1000 strokes : 37.5 Tolerance cm3/1000 strokes : + 0.5 Check tolerance cm3/1000s. : + 1.5 Spreed Tolerance cm3/1000 strokes : 2.5 Check tolerance	ALDA / ADA hPa : — Rated speed rpm : 1100 Del. quantity cm3/1000 strokes : 40.7 Tolerance cm3/1000 strokes : + 1.0 Check tolerance cm3/1000s. : + 2.0 Spreed Tolerance cm3/1000 strokes : 2.5 Check tolerance
Ref. pressure ALDA / ADA hPa : - Del. quantity cm3/1000 strokes : 37.5 Tolerance cm3/1000 strokes : + 0.5 Check tolerance cm3/1000s. : + 1.5 Spreed Tolerance cm3/1000 strokes : 2.5	ALDA / ADA hPa : — Rated speed rpm : 1100 Del. quantity cm3/1000 strokes : 40.7 Tolerance cm3/1000 strokes : + 1.0 Check tolerance cm3/1000s. : + 2.0 Spreed Tolerance cm3/1000 strokes : 2.5
Ref. pressure ALDA / ADA hPa : - Del. quantity cm3/1000 strokes : 37.5 Tolerance cm3/1000 strokes : + 0.5 Check tolerance cm3/1000s. : + 1.5 Spreed Tolerance cm3/1000 strokes : 2.5 Check tolerance	ALDA / ADA hPa : — Rated speed rpm : 1100 Del. quantity cm3/1000 strokes : 40.7 Tolerance cm3/1000 strokes : + 1.0 Check tolerance cm3/1000s. : + 2.0 Spreed Tolerance cm3/1000 strokes : 2.5 Check tolerance cm3/1000s. : 3.0
Ref. pressure ALDA / ADA hPa : - Del. quantity cm3/1000 strokes : 37.5 Tolerance cm3/1000 strokes : + 0.5 Check tolerance cm3/1000s. : + 1.5 Spreed Tolerance cm3/1000 strokes : 2.5 Check tolerance cm3/1000 strokes : 3.0	ALDA / ADA hPa : — Rated speed rpm : 1100 Del. quantity cm3/1000 strokes : 40.7 Tolerance cm3/1000 strokes : + 1.0 Check tolerance cm3/1000s. : + 2.0 Spreed Tolerance cm3/1000 strokes : 2.5 Check tolerance cm3/1000s. : 3.0 Ref. pressure
Ref. pressure ALDA / ADA hPa : - Del. quantity cm3/1000 strokes : 37.5 Tolerance cm3/1000 strokes : + 0.5 Check tolerance cm3/1000s. : + 1.5 Spreed Tolerance cm3/1000 strokes : 2.5 Check tolerance	ALDA / ADA hPa : — Rated speed rpm : 1100 Del. quantity cm3/1000 strokes : 40.7 Tolerance cm3/1000 strokes : + 1.0 Check tolerance cm3/1000s. : + 2.0 Spreed Tolerance cm3/1000 strokes : 2.5 Check tolerance cm3/1000 strokes : 3.0 Ref. pressure ALDA / ADA hPa : —
Ref. pressure ALDA / ADA hPa : - Del. quantity cm3/1000 strokes : 37.5 Tolerance cm3/1000 strokes : + 0.5 Check tolerance cm3/1000s. : + 1.5 Spreed Tolerance cm3/1000 strokes : 2.5 Check tolerance cm3/1000 strokes : 3.0 RATED SPEED	ALDA / ADA hPa : — Rated speed rpm : 1100 Del. quantity cm3/1000 strokes : 40.7 Tolerance cm3/1000 strokes : + 1.0 Check tolerance cm3/1000s. : + 2.0 Spreed Tolerance cm3/1000 strokes : 2.5 Check tolerance cm3/1000s. : 3.0 Ref. pressure ALDA / ADA hPa : — Rated speed rpm : 1350
Ref. pressure ALDA / ADA hPa : - Del. quantity cm3/1000 strokes : 37.5 Tolerance cm3/1000 strokes : + 0.5 Check tolerance cm3/1000s. : + 1.5 Spreed Tolerance cm3/1000 strokes : 2.5 Check tolerance cm3/1000 strokes : 3.0 RATED SPEED rack travel mm : 1.00	ALDA / ADA hPa : — Rated speed rpm : 1100 Del. quantity cm3/1000 strokes : 40.7 Tolerance cm3/1000 strokes : + 1.0 Check tolerance cm3/1000s. : + 2.0 Spreed Tolerance cm3/1000 strokes : 2.5 Check tolerance cm3/1000s. : 3.0 Ref. pressure ALDA / ADA hPa : — Rated speed rpm : 1350 Spreed
Ref. pressure ALDA / ADA hPa : - Del. quantity cm3/1000 strokes : 37.5 Tolerance cm3/1000 strokes : + 0.5 Check tolerance cm3/1000s. : + 1.5 Spreed Tolerance cm3/1000 strokes : 2.5 Check tolerance cm3/1000 strokes : 3.0 RATED SPEED rack travel mm : 1.00 Tolerance mm : + 0.70	ALDA / ADA hPa : — Rated speed rpm : 1100 Del. quantity cm3/1000 strokes : 40.7 Tolerance cm3/1000 strokes : + 1.0 Check tolerance cm3/1000s. : + 2.0 Spreed Tolerance cm3/1000 strokes : 2.5 Check tolerance cm3/1000s. : 3.0 Ref. pressure ALDA / ADA hPa : — Rated speed rpm : 1350 Spreed Del. quantity
Ref. pressure ALDA / ADA hPa : - Del. quantity cm3/1000 strokes : 37.5 Tolerance cm3/1000 strokes : + 0.5 Check tolerance cm3/1000s. : + 1.5 Spreed Tolerance cm3/1000 strokes : 2.5 Check tolerance cm3/1000 strokes : 3.0 RATED SPEED rack travel mm : 1.00	ALDA / ADA hPa : — Rated speed rpm : 1100 Del. quantity cm3/1000 strokes : 40.7 Tolerance cm3/1000 strokes : + 1.0 Check tolerance cm3/1000s. : + 2.0 Spreed Tolerance cm3/1000 strokes : 2.5 Check tolerance cm3/1000s. : 3.0 Ref. pressure ALDA / ADA hPa : — Rated speed rpm : 1350 Spreed Del. quantity cm3/1000 strokes : 39.5
Ref. pressure ALDA / ADA hPa : - Del. quantity cm3/1000 strokes : 37.5 Tolerance cm3/1000 strokes : + 0.5 Check tolerance cm3/1000s. : + 1.5 Spreed Tolerance cm3/1000 strokes : 2.5 Check tolerance cm3/1000 strokes : 3.0 RATED SPEED rack travel mm : 1.00 Tolerance mm : + 0.70	ALDA / ADA hPa : — Rated speed rpm : 1100 Del. quantity cm3/1000 strokes : 40.7 Tolerance cm3/1000 strokes : + 1.0 Check tolerance cm3/1000s. : + 2.0 Spreed Tolerance cm3/1000 strokes : 2.5 Check tolerance cm3/1000s. : 3.0 Ref. pressure ALDA / ADA hPa : — Rated speed rpm : 1350 Spreed Del. quantity cm3/1000 strokes : 39.5 Tolerance
Ref. pressure ALDA / ADA hPa : - Del. quantity cm3/1000 strokes : 37.5 Tolerance cm3/1000 strokes : + 0.5 Check tolerance cm3/1000s. : + 1.5 Spreed Tolerance cm3/1000 strokes : 2.5 Check tolerance cm3/1000 strokes : 3.0 RATED SPEED rack travel mm : 1.00 Tolerance mm : + 0.70	ALDA / ADA hPa : — Rated speed rpm : 1100 Del. quantity cm3/1000 strokes : 40.7 Tolerance cm3/1000 strokes : + 1.0 Check tolerance cm3/1000s. : + 2.0 Spreed Tolerance cm3/1000 strokes : 2.5 Check tolerance cm3/1000s. : 3.0 Ref. pressure ALDA / ADA hPa : — Rated speed rpm : 1350 Spreed Del. quantity cm3/1000 strokes : 39.5 Tolerance cm3/1000 strokes : + 0.8
Ref. pressure ALDA / ADA hPa : - Del. quantity cm3/1000 strokes : 37.5 Tolerance cm3/1000 strokes : + 0.5 Check tolerance cm3/1000s. : + 1.5 Spreed Tolerance cm3/1000 strokes : 2.5 Check tolerance cm3/1000s. : 3.0 RATED SPEED rack travel mm : 1.00 Tolerance mm : + 0.70 Rated speed rpm : 1750	ALDA / ADA hPa : — Rated speed rpm : 1100 Del. quantity cm3/1000 strokes : 40.7 Tolerance cm3/1000 strokes : + 1.0 Check tolerance cm3/1000s. : + 2.0 Spreed Tolerance cm3/1000 strokes : 2.5 Check tolerance cm3/1000s. : 3.0 Ref. pressure ALDA / ADA hPa : — Rated speed rpm : 1350 Spreed Del. quantity cm3/1000 strokes : 39.5 Tolerance cm3/1000 strokes : + 0.8 Check tolerance
Ref. pressure ALDA / ADA hPa : - Del. quantity cm3/1000 strokes : 37.5 Tolerance cm3/1000 strokes : + 0.5 Check tolerance cm3/1000s. : + 1.5 Spreed Tolerance cm3/1000 strokes : 2.5 Check tolerance cm3/1000 strokes : 3.0 RATED SPEED rack travel mm : 1.00 Tolerance mm : + 0.70	ALDA / ADA hPa : — Rated speed rpm : 1100 Del. quantity cm3/1000 strokes : 40.7 Tolerance cm3/1000 strokes : + 1.0 Check tolerance cm3/1000s. : + 2.0 Spreed Tolerance cm3/1000 strokes : 2.5 Check tolerance cm3/1000s. : 3.0 Ref. pressure ALDA / ADA hPa : — Rated speed rpm : 1350 Spreed Del. quantity cm3/1000 strokes : 39.5 Tolerance cm3/1000 strokes : + 0.8 Check tolerance cm3/1000s. : + 1.8
Ref. pressure ALDA / ADA hPa : - Del. quantity cm3/1000 strokes : 37.5 Tolerance cm3/1000 strokes : + 0.5 Check tolerance cm3/1000s. : + 1.5 Spreed Tolerance cm3/1000 strokes : 2.5 Check tolerance cm3/1000s. : 3.0 RATED SPEED rack travel mm : 1.00 Tolerance mm : + 0.70 Rated speed rpm : 1750 LOW IDLE	ALDA / ADA hPa : — Rated speed rpm : 1100 Del. quantity cm3/1000 strokes : 40.7 Tolerance cm3/1000 strokes : + 1.0 Check tolerance cm3/1000s. : + 2.0 Spreed Tolerance cm3/1000 strokes : 2.5 Check tolerance cm3/1000s. : 3.0 Ref. pressure ALDA / ADA hPa : — Rated speed rpm : 1350 Spreed Del. quantity cm3/1000 strokes : 39.5 Tolerance cm3/1000 strokes : + 0.8 Check tolerance cm3/1000s. : + 1.8 Spreed
Ref. pressure ALDA / ADA hPa : - Del. quantity cm3/1000 strokes : 37.5 Tolerance cm3/1000 strokes : + 0.5 Check tolerance cm3/1000s. : + 1.5 Spreed Tolerance cm3/1000 strokes : 2.5 Check tolerance cm3/1000 strokes : 3.0 RATED SPEED rack travel mm : 1.00 Tolerance mm : + 0.70 Rated speed rpm : 1750	ALDA / ADA hPa : — Rated speed rpm : 1100 Del. quantity cm3/1000 strokes : 40.7 Tolerance cm3/1000 strokes : + 1.0 Check tolerance cm3/1000s. : + 2.0 Spreed Tolerance cm3/1000 strokes : 2.5 Check tolerance cm3/1000s. : 3.0 Ref. pressure ALDA / ADA hPa : — Rated speed rpm : 1350 Spreed Del. quantity cm3/1000 strokes : 39.5 Tolerance cm3/1000 strokes : + 0.8 Check tolerance cm3/1000s. : + 1.8 Spreed Tolerance
Ref. pressure ALDA / ADA hPa : - Del. quantity cm3/1000 strokes : 37.5 Tolerance cm3/1000 strokes : + 0.5 Check tolerance cm3/1000s. : + 1.5 Spreed Tolerance cm3/1000 strokes : 2.5 Check tolerance cm3/1000s. : 3.0 RATED SPEED rack travel mm : 1.00 Tolerance mm : + 0.70 Rated speed rpm : 1750 LOW IDLE Load pick-up	ALDA / ADA hPa : — Rated speed rpm : 1100 Del. quantity cm3/1000 strokes : 40.7 Tolerance cm3/1000 strokes : + 1.0 Check tolerance cm3/1000s. : + 2.0 Spreed Tolerance cm3/1000 strokes : 2.5 Check tolerance cm3/1000s. : 3.0 Ref. pressure ALDA / ADA hPa : — Rated speed rpm : 1350 Spreed Del. quantity cm3/1000 strokes : 39.5 Tolerance cm3/1000 strokes : + 0.8 Check tolerance cm3/1000s. : + 1.8 Spreed Tolerance cm3/1000 strokes : 2.5
Ref. pressure ALDA / ADA hPa : - Del. quantity cm3/1000 strokes : 37.5 Tolerance cm3/1000 strokes : + 0.5 Check tolerance cm3/1000s. : + 1.5 Spreed Tolerance cm3/1000 strokes : 2.5 Check tolerance cm3/1000s. : 3.0 RATED SPEED rack travel mm : 1.00 Tolerance mm : + 0.70 Rated speed rpm : 1750 LOW IDLE	ALDA / ADA hPa : — Rated speed rpm : 1100 Del. quantity cm3/1000 strokes : 40.7 Tolerance cm3/1000 strokes : + 1.0 Check tolerance cm3/1000s. : + 2.0 Spreed Tolerance cm3/1000 strokes : 2.5 Check tolerance cm3/1000s. : 3.0 Ref. pressure ALDA / ADA hPa : — Rated speed rpm : 1350 Spreed Del. quantity cm3/1000 strokes : 39.5 Tolerance cm3/1000 strokes : + 0.8 Check tolerance cm3/1000s. : + 1.8 Spreed Tolerance

STARTING FUEL DELIVERY

Rated speed rpm : 100
rack travel mm : > 20.10
Del. quantity
cm3/1000 strokes : 52.0
Spreed
Tolerance
cm3/1000 strokes : 6.0
Check tolerance
cm3/1000s. : 6.0

LOW IDLE

Del. quantity
cm3/1000 strokes : 7.8
Check tolerance
cm3/1000s. : + 2.3
Spreed
Check tolerance
cm3/1000s. : 1.5

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

: 06.03.96 Edition Test oil : ISO 4113

Combination No. : 0 400 074 878

Injection pump

Pump designation : PES4M55C32DRS188 EP type number : 0 410 054 935

Governor

Governer design. : RSF400/2000M82 Governer no. : 0 420 021 283

Cust. part No.

Customer-spec. information Customer : DPICO

: 0M601-2.3L Motor Power KW : 58.0

TEST BENCH REQUIREMENTS

Test oil inlet

temp. °C Tolerance °C : +- 2.0

Overflow valve : 1 469 990 351

Inlet press. bar : 1.0

Test nozzle holde

: 1 688 901 111 assembly

Opening pressure

: 148.5 bar Tolerance bar

Test Lines : 1 680 750 014

Outside diameter : 6.0

x inside diameter: 2.0 x length mm : 600

REMARKS

(A) INJECTION PUMP SETTING VALUES Set equal delivery quant. per values _____

BEGINNING OF DELIVERY

Test pressure bar : 26.0 Tolerance bar : + 1.0

Prestroke mm 2.05 : + 0.05 Tolerance mm Check

tolerance mm : + 0.10

Rack travel in mm : 21.00 Tolerance mm : +- 1.00

Firing order : 1-3-4-2

Phasing : 0-90-180-270

Start of delivery blocking

*NW after s.o.d. : 15.50 Tolerance : +- 0.20 Check

tolerance °NW : +- 0.30

: 1 Barrel no.

BASIC SETTING

Rated speed rpm : 1000

Rack travel in mm: 12.15 Tolerance mm : \leftarrow 0.05

Del. quantity cm3/1000 strokes : 38.5

Tolerance cm3/1000 strokes : +- 0.5

Check tolerance cm3/1000s. : +- 1.5

Spreed Tolerance

cm3/1000 strokes : 2.5

Check tolerance cm3/1000s. : 3.0	Rated speed rpm : 1000
Rated speed rpm : 400	T CRT mm max. : 1.45
Rack travel in mm : 4.90 Tolerance mm : + 0.10 Del. quantity	LOW IDLE
cm3/1000 strokes : 6.5 Tolerance cm3/1000 strokes : + 0.5 Spreed	control lever position degree : 12.5 tolerance degree : +- 2.0
Tolerance cm3/1000 strokes : 1.0	Setting point w/out bumper spring Rated speed rpm : 400 rack travel mm : 4.90
(B) SETTING OF INJECTION PUMP WITH GOVERNOR	SET IDLE AUXILIARY SPRING
IDLE STAGE	Rated speed rpm : 500 rack travel mm : 3.40 Tolerance mm : + 0.10
Rack travel in mm: 6.25 Tolerance mm: +- 0.25	Load pick-up
	Rated speed rpm : 250
FULL LOAD DELIVERY AT FULL LOAD STOP	CRT mm min. : 13.00
Rated speed rpm : 1000 Ref. pressure	Rated speed rpm : 1000
ALDA / ADA hPa : 1100 Del. quantity	CRT mm max. : 1.45
cm3/1000 strokes : 38.5 Tolerance	rack travel mm : 4.90 Rated speed rpm : 400
cm3/1000 strokes : + 0.5 Check tolerance cm3/1000s. : + 1.5	<u> </u>
Spreed Tolerance	TORQUE CONTROL
cm3/1000 strokes : 2.5 Check tolerance	Rated speed rpm : 1000 rack travel mm : 12.15
cm3/1000s. : 3.0	Tolerance mm : +- 0.05
RATED SPEED	Rated speed rpm : 2000 rack travel mm : 12.15 Tolerance mm : +- 0.10
control lever position degree : 50.0	ADJUSTMENT TEST ADA/ALDA
rack travel mm : 7.60 Rated speed rpm : 2250	SETTING
rack travel mm : 0.50 Tolerance mm : + 0.50 Rated speed rpm : 2550	+ Rated speed rpm : 1000 + Ref. pressure + ALDA / ADA hPa : 940 + rack travel mm : -0.10 + Tolerance mm : + 0.10
SET IDLE CONTROL LEVER POSITION	+ MEASUREMENT

Rated speed rpm	: 1000	<u> </u>
Ref. pressure		+ LOW IDLE
ALDA / ADA hPa rack travel mm	: 900 : ~0.40	+ Rated speed rpm : 400
Tolerance mm	: +- 0.10	+ Rated speed rpm : 400 + rack travel mm : 4.90
roter direc min		+ Tolerance mm : +- 0.10
Rated speed rpm	: 1000	+ Del. quantity
Ref. pressure		+ cm3/1000 strokes : 7.8
ALDA / ADA hPa	: 750	+ Check tolerance
rack travel mm	-1.50	+ cm3/1000s. : + 2.3
Tolerance mm	: +- 0.20	+ Spreed + Check tolerance
		- cm3/1000s. : 1.5
		+
FUEL DELIVERY CHA	ARACTERISTICS	
Ref. pressure ALDA / ADA hPa	: 1100	†
Rated speed rpm		Grad : > 47.00
Del. quantity	. 2000	1 01 00
cm3/1000 strokes	: 42.0	Grad : < 44.50
Tolerance		+
cm3/1000 strokes	: 1.0	CETTAIC PARLIMATTO FACT TO F (FLA)
Check tolerance cm3/1000s.	: +- 2.0	+ SETTING PNEUMATIC FAST IDLE (ELA)
Spreed	2.0	I
Tolerance		+ control lever
cm3/1000 strokes	: 2.5	position degree : 12.5
Check tolerance	~ ^	+ tolerance degree : +- 2.0
cm3/1000s.	: 3.0	+ Rated speed rpm : 425
		+ Rated speed rpm : 425
		Rack travel in mm: 8.70
HIGH IDLE		+ Tolerance mm : + 0.80
		+ Del. quantity
Ref. pressure	4400	+ cm3/1000 strokes : 22.0
ALDA / ADA hPa	: 1100	+ Tolerance + cm3/1000 strokes : +- 3.5
		+ Check tolerance
STARTING FUEL DEL	IVERY	+ cm3/1000s. : +- 4.5
		+ Vacuum hPa : 400.0
Rated speed rpm	: 100	†
rack travel mm		OFFITALO (TEOTENIO EL FOTRONIZO, TAL F
Tolerance mm	: ← 1.50	+ SETTING/TESTING ELECTRONIC IDLE + REGULATION (ELR)
Del. quantity cm3/1000 strokes	: 60.3	T WEGGENITON CEEKS
Tolerance	. 00.0	+
cm3/1000 strokes	: +- 4.0	the control lever
Check tolerance		† position degree : 12.5
cm3/1000s.	: +- 5.0	tolerance degree : + 2.0
Spreed Tolerance		İ
cm3/1000 strokes	: 6.0	T control lever
Check tolerance		position degree : 50.0
cm3/1000s.	: 6.0	
		ADJUSTMENT
		t control lever
		+ position degree : 50.0
		Popinion degree Popin

TESTING PNEUMATIC SHUTOFF DEVICE

Rated speed rpm : 400

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

Edition : 07.03.96 Test oil : ISO 4113

Combination No. : 0 400 074 879

Injection pump

Pump designation : PES4M55C32ORS188 EP type number : 0 410 054 935

Governor

Governer design. : RSF400/2000M80 Governer no. : 0 420 021 281

Cust. part No. :

Customer-spec. information Customer : DPICO

: 0M601-2.3L Motor

Power KW : 58.0

TEST BENCH REQUIREMENTS

Test oil inlet

temp. °C 40 Tolerance °C : +- 2.0

Overflow valve : 1 469 990 351

Inlet press. bar : 1.0

Test nozzle holde

assembly : 1 688 901 111

Opening pressure

: 148.5 Tolerance bar

Test Lines : 1 680 750 014

Outside diameter : 6.0

x inside diameter: 2.0 x length mm : 600

REMARKS

(A) INJECTION PUMP SETTING VALUES Set equal delivery quant. per values _____

BEGINNING OF DELIVERY

Test pressure bar : 26.0 Tolerance bar : + 1.0

Prestroke mm 2.05 : +- 0.05 Tolerance mm Check

: +- 0.10 tolerance mm

Rack travel in mm : 21.00 : +- 1.00 Tolerance mm

Firing order : 1-3-4-2

: 0-90-180-270 Phasing

Start of delivery blocking

*NW after s.o.d. : 15.50 Tolerance : +- 0.20 Check

tolerance °NW : +- 0.30

Barrel no. : 1

BASIC SETTING

Rated speed rpm : 1000

Rack travel in mm : 12.15 Tolerance mm : \leftarrow 0.05

Del. quantity cm3/1000 strokes : 38.5

Tolerance

cm3/1000 strokes : +- 0.5

Check tolerance cm3/1000s. : +- 1.5

Spreed

Tolerance

Check tolerance cm3/1000s.	: 3.0	- - Rated speed rpm : 1000
Rated speed rpm	: 400	- CRT mm max. : 1.45
Rack travel in mm Tolerance mm Del. quantity		- LOW IDLE
cm3/1000 strokes	: 6.5	
Tolerance cm3/1000 strokes	05	control lever : 14.0
Spreed	0.5	tolerance degree : + 2.0
olerance m3/1000 strokes	: 1.0	 Setting point w/out bumper spring Rated speed rpm : 400
	+	rack travel mm : 4.90
B) SETTING OF INJUST BITH GOVERNOR	ECTION PUMP	SET IDLE AUXILIARY SPRING
		Rated speed rpm : 500
DLE STAGE	+	rack travel mm : 3.40 Tolerance mm : + 0.10
ack travel in mm : olerance mm		Load pick-up
Tell and the film		Rated speed rpm : 250
JLL LOAD DELIVERY	AT FULL LOAD STOP	CRT mm min. : 12.30
ated speed rpm : ef. pressure	: 1000	Rated speed rpm : 1000
_DA / ADA hPa :	: - +	CRT mm max. : 1.45
l. quantity 3/1000 strokes :	: 38.5	rack travel mm : 4.90
lerance	1	Rated speed rpm : 400
3/1000 strokes : eck tolerance	+	
3/1000S. : reed	: +- 1.5	TORQUE CONTROL
olerance	1	TORAGE CONTROL
m3/1000 strokes :	: 2.5	Rated speed rpm : 1000
neck tolerance m3/1000S. :	3.0	rack travel mm : 12.15 Tolerance mm : +- 0.05
	·	
TEN COPEN		Rated speed rpm : 2000
TED SPEED	Ŧ	rack travel mm : 12.15 Tolerance mm : + 0.10
ontrol lever	‡	
osition degree :	50.0	
ack travel mm :	7.40	FUEL DELIVERY CHARACTERISTICS
eted speed rpm :		
ack travel mm :	0.50	Ref. pressure ALDA / ADA hPa : -
olerance mm :	+ 0.50	Rated speed rpm : 2000
ated speed rpm :	2550 +	Del. quantity
· · · · · · · · · · · · · · · · · · ·	<u> </u>	cm3/1000 strokes : 42.0 Tolerance
		cm3/1000 strokes : + 1.0

Check tolerance cm3/1000S. Spreed Tolerance cm3/1000 strokes Check tolerance cm3/1000S.	: 2.5	control lever position degree : 14.0 tolerance degree : + 2.0 Rated speed rpm : 425 Rack travel in mm : 8.70
		+ Tolerance mm : + 0.80 - + Del. quantity
HIGH IDLE		cm3/1000 strokes : 22.0
Ref. pressure ALDA / ADA hPa	: ~	cm3/1000 strokes : + 3.5 Check tolerance cm3/1000s. : + 4.5
STARTING FUEL DEL	IVERY	- + Vacuum hPa : 400.0
Rated speed rpm rack travel mm Tolerance mm	: 21.60	SETTING/TESTING ELECTRONIC IDLE REGULATION (ELR)
Del. quantity cm3/1000 strokes Tolerance cm3/1000 strokes	: +- 4.0	control lever position degree : 14.0 tolerance degree : +- 2.0
Check tolerance cm3/1000s. Spreed Tolerance	: + 5.0	control lever position degree : 50.0
cm3/1000 strokes Check tolerance		ADJUSTMENT
cm3/1000s.		control lever position degree : 50.0
LOW IDLE		+
Rated speed rpm	: 400	† TESTING PNEUMATIC SHUTOFF DEVICE
rack travel mm Tolerance mm	: 4.90 : +- 0.10	Rated speed rpm : 400
Del. quantity cm3/1000 strokes Check tolerance cm3/1000s.	: 7.8 : +- 2.3	End of test specification sheet
Spreed Check tolerance cm3/1000s.	: 1.5	
		† †
Grad	: > 47.00	<u>†</u>
Grad	: < 44.50	1
SETTING PNEUMATIC	FAST IDLE (ELA)	

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

Edition : 07,03,96 Test oil : ISO 4113

Combination No. : 0 400 074 882

Injection pump

Pump designation : PES4M55C32ORS184 EP type number : 0 410 054 938

Governor

Governer design. : RSF375/1700M77-1 : 0 420 021 275 Governer no.

Cust. part No. :

Customer-spec. information Customer : MB-PKW : 0M601-2.3L Motor : 50.0 Power KW

TEST BENCH REQUIREMENTS

Test oil inlet

temp. °C Tolerance °C 2.0

Overflow valve : 1 469 990 351

Inlet press. bar : 1.0

Test nozzle holde

: 1 688 901 111 assembly

Opening pressure

: 148.5 bar : + 1.5 Tolerance bar

Test lines : 1 680 750 014

Outside diameter : 6.0

2.0 x inside diameter: 600 x length mm :

REMARKS

(A) INJECTION PUMP SETTING VALUES Set equal delivery quant. per values _____

BEGINNING OF DELIVERY

Test pressure bar : Tolerance bar : +- 1.0

Prestroke mm 2.05 : + - 0.05Tolerance mm Check

tolerance mm : + 0.10

Rack travel in mm: 21.00 Tolerance mm : +- 1.00

: 1-3-4-2 Firing order

: 0-90-180-270 Phasing

Start of delivery blocking

*NW after s.o.d. : 16.50 Tolerance : +- 0.20 Check

tolerance °NW : + - 0.30

Barrel no.

BASIC SETTING

Rated speed rpm : 1700

Rack travel in mm: 11.50 Tolerance mm : \leftarrow 0.05

Del. quantity cm3/1000 strokes : 39.0

Tolerance

cm3/1000 strokes : \leftarrow 0.5

Check tolerance cm3/1000s. : + 1.5

Spreed

Tolerance

Check tolerance cm3/1000\$. : 3.0	- - Rated speed rpm : 1000
Rated speed rpm : 375	- CRT mm max. : 1.45
Rack travel in mm: 5.00 Tolerance mm: + 0.10 Del. quantity	LOW IDLE
cm3/1000 strokes : 6.5	
Tolerance	- control lever - position degree : 14.0
Spreed	tolerance degree : + 2.0
Tolerance cm3/1000 strokes : 1.0	Setting point w/out bumper spring Rated speed rpm : 375 rack travel mm : 5.00
(B) SETTING OF INJECTION PUMP WITH GOVERNOR	SET IDLE AUXILIARY SPRING
+	
IDLE STAGE	Rated speed rpm : 450 rack travel mm : 3.60 Tolerance mm : + 0.10
Rack travel in mm: 6.25 Tolerance mm: + 0.25	Load pick-up
	Rated speed rpm : 250
FULL LOAD DELIVERY AT FULL LOAD STOP	CRT mm min. : > 10.00
Rated speed rpm : 1700 Ref. pressure	Rated speed rpm : 1000
ALDA / ADA hPa : 1100 Del. quantity	CRT mm max. : 1.45
cm3/1000 strokes : 39.0	rack travel mm : 5.00 Rated speed rpm : 375
cm3/1000 strokes : + 0.5 Check tolerance	
cm3/1000s. : + 1.5	TORQUE CONTROL
Tolerance	
cm3/1000 strokes : 2.5	Rated speed rpm : 1700
Check tolerance cm3/1000s. : 3.0	rack travel mm : 11.50 Tolerance mm : + 0.05
<u> </u>	Rated speed rpm : 1000
RATED SPEED	rack travel mm : 11.50 Tolerance mm : +- 0.20
control lever	
position degree : 50.0	ADJUSTMENT TEST ADA/ALDA
rack travel mm : 6.70 Rated speed rpm : 2000	SETTING
+	Rated speed rpm : 1000
rack travel mm : 0.50 + O.50 + O.50	Ref. pressure ALDA / ADA hPa : 940
Rated speed rpm : 2300	rack travel mm : -0.10 Tolerance mm : +- 0.10
SET IDLE CONTROL LEVER POSITION	MEASUREMENT

		1	
Rated speed rpm	: 1000		375
Ref. pressure	200		5.00
ALDA / ADA hPa	900	+ Tolerance mm : +-	0.10
rack travel mm Tolerance mm	: −0.40 : ← 0.10	<pre>Del. quantity cm3/1000 strokes :</pre>	7.8
Rated speed rpm	: 1000	theck tolerance cm3/1000s. :+-	2.3
Ref. pressure		Spreed	
ALDA / ADA hPa rack travel mm	: 750 : -1.50	theck tolerance cm3/1000s.	1.5
Tolerance mm	: + 0.20	+ cm3/1000s. :	1.5
		†	
		_	
FUEL DELIVERY CHA	ARACTERISTICS	+	
Dof procure		+ Grad : > 4	7.00
Ref. pressure ALDA / ADA hPa	: 1100	F Grad : < 4	4 50
Rated speed rpm		Į orau	7.50
Del. quantity			
cm3/1000 strokes	: 36.5	+ SETTING PNEUMATIC FAST I	DLE (ELA)
Tolerance		+	
cm3/1000 strokes	: + 1.0	†	
Check tolerance cm3/1000s.	: +- 2.0	+ control lever	14.0
Spreed	: 2.0	<pre>position degree : tolerance degree : +-</pre>	2.0
Tolerance		toterance degree	2.0
cm3/1000 strokes	: 2.5	Rated speed rpm : 4	25
Check tolerance		+	
cm3/1000s.	: 3.0	A Rack travel in mm:	7.30
		† Tolerance mm : +-	0.80
		† Del. quantity	
HEAL TALE			16.0
HIGH IDLE		+ Tolerance + cm3/1000 strokes : +	3.5
Ref. pressure		+ Check tolerance	3.3
ALDA / ADA hPa	: 1100	I cm3/1000s. : +-	4.5
HENN / HENN III W			00.0
		- +	
STARTING FUEL DEL	IVERY	CETTING (TECTING ELECTION)	70 TN C
Rated speed rpm	: 100	+ SETTING/TESTING ELECTRON REGULATION (ELR)	IC IDEE
rack travel mm		T REGULATION CELRY	
Del. quantity	. > 20.10	1	
cm3/1000 strokes	: 59.0	→ control lever	
Tolerance		+ position degree :	14.0
cm3/1000 strokes	: +- 4.0	tolerance degree : +-	2.0
Check tolerance		†	
cm3/1000s.	: ← 5.0	†	
Spreed Tolerance		<pre>control lever position degree :</pre>	50.0
cm3/1000 strokes	: 6.0	position degree .	
Check tolerance	. 0.0	T ADJUSTMENT	
cm3/1000s.	: 6.0	+	
		+ control lever	_
		+ position degree :	50.0
		†	
		- +	

LOW IDLE

TESTING PNEUMATIC SHUTOFF DEVICE

Rated speed rpm : 375

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

: 07.03.96 Edition Test oil : ISO 4113

Combination No. : 0 400 074 884

Injection pump

Pump designation : PES4M55C32ORS184 EP type number : 0 410 054 938

Governor

Governer design. : RSF375/1900M77 Governer no. : 0 420 021 273

Cust. part No. :

Customer-spec. information Customer : MB-PKW : 0M601-2.3L Motor

Power KW : 58.0

TEST BENCH REQUIREMENTS

Test oil inlet

temp. °C : +- 2.0 Tolerance °C

Overflow valve : 1 469 990 351

Inlet press. bar : 1.0

Test nozzle holde

: 1 688 901 111 assembly

Opening pressure

: 148.5 Tolerance bar

Test Lines : 1 680 750 014

Outside diameter : 6.0

x inside diameter: 2.0 x length mm : 600

REMARKS

(A) INJECTION PUMP SETTING VALUES Set equal delivery quant. per values ____

BEGINNING OF DELIVERY

Test pressure bar : 26.0 Tolerance bar : + 1.0

Prestroke mm 2.05 : +- 0.05 Tolerance mm

Check

: + 0.10tolerance mm

Rack travel in mm: 21.00 Tolerance mm : +- 1.00

Firing order : 1-3-4-2

Phasing : 0-90-180-270

Start of delivery blocking

*NW after s.o.d. : 16.50 Tolerance : +- 0.20 Check

: +- 0.30 tolerance "NW

Barrel no. : 1

BASIC SETTING

Rated speed rpm : 1850

Rack travel in mm: 12.30 Tolerance mm : + 0.05

Del. quantity cm3/1000 strokes : 42.0

Tolerance

cm3/1000 strokes : +- 0.5

Check tolerance cm3/1000s. : +- 1.5

Spreed

Tolerance cm3/1000 strokes : 2.5

Check tolerance cm3/1000s.	: 3.0	Rated speed rpr	n
Rated speed rpm	: 375	CRT mm max.	
Del. quantity	: +- 0.10	LOW IDLE	
cm3/1000 strokes Tolerance cm3/1000 strokes Spreed		control lever position degree tolerance degre	
Tolerance cm3/1000 strokes	: 1.0	Setting point v	n/0
(B) SETTING OF INJ	ECTION PUMP	rack travel mm + SET IDLE AUXILI	T A 🗅
WITH GOVERNOR		+	
IDLE STAGE		Rated speed rpm rack travel mm Tolerance mm	n
Rack travel in mm Tolerance mm	: 6.25 : + 0.25	Load pick-up	
		Rated speed rpm	n
FULL LOAD DELIVERY	AT FULL LOAD STOP	CRT mm min.	
Rated speed rpm Ref. pressure	: 1850	Rated speed rpm	1
ALDA / ADA hPa Del. quantity	: 1100	CRT mm max.	
cm3/1000 strokes Tolerance	: 42.0	rack travel mm Rated speed rpm	1
cm3/1000 strokes Check tolerance		+	
cm3/1000S. Spreed Tolerance	: +- 1.5	TORQUE CONTROL	
cm3/1000 strokes Check tolerance	: 2.5	Rated speed rpm	}
cm3/1000s.	: 3.0	Tolerance mm	
RATED SPEED		Rated speed rpm rack travel mm Tolerance mm)
control lever position degree	: 50.0	ADJUSTMENT TEST	· A
rack travel mm Rated speed rpm	: 5.60 : 2200	SETTING	
rack travel mm	: 0.50	Rated speed rpm Ref. pressure	1
Tolerance mm	: ← 0.50	+ ALDA / ADA hPa	
Rated speed rpm	: 2400	rack travel mm Tolerance mm	
SET IDLE CONTROL L	EVER POSITION	— † MEASUREMENT	

: 1.45 : + 14.0 : + 2.0 out bumper spring : 375 : 5.00 RY SPRING : 450 : 3.70 : + 0.10 : 250 : > 10.20 1000 : 1.45 : 5.0 : 375 5.00 : 1850 : 12.30 : + 0.05 : 1000 : 12.30 : + 0.10 ADA/ALDA : 1000 : 940 : -0.10 : +- 0.10

: 1000

Rated speed rpm Ref. pressure ALDA / ADA hPa rack travel mm Tolerance mm Rated speed rpm Ref. pressure ALDA / ADA hPa	: 900 : -0.40 : +- 0.10 : 1000 : 750	Del. quantity cm3/1000 strokes : 7.8 Check tolerance cm3/1000s. : + 2.3 Spreed Check tolerance cm3/1000s. : 1.5
rack travel mm Tolerance mm	: -7.50	Grad : > 47.00
FUEL DELIVERY CHA	ARACTERISTICS	+ Grad : < 44.50
Ref. pressure ALDA / ADA hPa Rated speed rpm		SETTING PNEUMATIC FAST IDLE (ELA)
Del. quantity cm3/1000 strokes Tolerance cm3/1000 strokes Check tolerance	: +- 1.0	control lever position degree : 14.0 tolerance degree : +- 2.0
cm3/1000s. Spreed Tolerance cm3/1000 strokes		Rated speed rpm : 425 Rack travel in mm : 7.30 Tolerance mm : + 0.80
Check tolerance cm3/1000s.	: 3.0	Del. quantity cm3/1000 strokes : 16.0 Tolerance cm3/1000 strokes : + 3.5
HIGH IDLE Ref. pressure		- + Check tolerance - cm3/1000S. : +- 4.5 - Vacuum hPa : 400.0
ALDA / ADA hPa	: 1100	SETTING/TESTING ELECTRONIC IDLE REGULATION (ELR)
STARTING FUEL DEL	LIVERY	
Rated speed rpm rack travel mm Del. quantity cm3/1000 strokes	: 100 : > 20.10 : 59.0	control lever position degree : 14.0 tolerance degree : +- 2.0
Tolerance cm3/1000 strokes Check tolerance	: +- 4.0	control lever position degree : 50.0
cm3/1000s. Spreed Tolerance	: +- 5.0	ADJUSTMENT
cm3/1000 strokes Check tolerance cm3/1000s.	: 6.0 : 6.0	control lever position degree : 50.0
		TESTING PNEUMATIC SHUTOFF DEVICE
LOW IDLE		Rated speed rpm : 375

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

Edition ' : 07.03.96 Test oil : ISO 4113

Combination No. : 0 400 074 885

Injection pump

Pump designation : PES4M55C32ORS167 : 0 410 054 960 EP type number

Governor

Governer design. : RSF375/2000M56-14 : 0 420 021 271 Governer no.

Cust. part No. :

Customer-spec. information

Customer : DPICO : 0M601-2.3L Motor

Power KW : 58.0

TEST BENCH REQUIREMENTS

Test oil inlet

temp. °C 40 Tolerance °C : +- 2.0

Overflow valve : 1 469 990 351

Inlet press. bar : 1.0

Test nozzle holde

: 1 688 901 111 assembly

Opening pressure

: 148.5 bar Tolerance bar : +- 1.5

Test lines : 1 680 750 014

Outside diameter : 6.0

x inside diameter: 2.0 600 x Length mm :

REMARKS

(A) INJECTION PUMP SETTING VALUES Set equal delivery quant. per values _____

BEGINNING OF DELIVERY

Test pressure bar : 26.0 Tolerance bar : + 1.0

Prestroke mm 2.05 : +- 0.05 Tolerance mm

Check

: + 0.10tolerance mm

Rack travel in mm: 21.00 : +- 1.00 Tolerance mm

: 1-3-4-2 Firing order

Phasing : 0-90-180-270

Start of delivery blocking

*NW after s.o.d. : 15.50 : +- 0.20 Tolerance Check

tolerance *NW : +- 0.30

Barrel no. 1 :

BASIC SETTING

Rated speed rpm : 1000

Rack travel in mm: 12.15 : +- 0.05 Tolerance mm

Del. quantity cm3/1000 strokes : 38.5

Tolerance cm3/1000 strokes : + 0.5

Check tolerance cm3/1000s. : + 1.5

Spreed Tolerance

Check tolerance cm3/1000s. : 3.0	Rated speed rpm : 1000
Rated speed rpm : 375	- CRT mm max. : 1.45
Rack travel in mm: 5.20 Tolerance mm: + 0.10 Del. quantity	- LOW IDLE
cm3/1000 strokes : 6.5 Tolerance	- - control lever
cm3/1000 strokes : + 0.5 Spreed Tolerance	- position degree : 14.0 - tolerance degree : + 2.0
cm3/1000 strokes : 1.0	- Setting point w/out bumper spring - Rated speed rpm : 375 - rack travel mm : 5.20
(B) SETTING OF INJECTION PUMP WITH GOVERNOR	- SET IDLE AUXILIARY SPRING
IDLE STAGE	Rated speed rpm : 450 rack travel mm : 3.90 Tolerance mm : + 0.10
Rack travel in mm: 6.25 Tolerance mm: + 0.25	- Load pick-up
+	- Rated speed rpm : 250
FULL LOAD DELIVERY AT FULL LOAD STOP	- CRT mm min. : 11.50
Rated speed rpm : 1000	Rated speed rpm : 1000
Ref. pressure ALDA / ADA hPa : 1100 Del. quantity	CRT mm max. : 1.45
cm3/1000 strokes : 38.5	rack travel mm : 5.20 Rated speed rpm : 375
cm3/1000 strokes : + 0.5 Check tolerance cm3/1000s. : + 1.5	· ·
Spreed Tolerance	TORQUE CONTROL
cm3/1000 strokes : 2.5	Rated speed rpm : 1000
Check tolerance cm3/1000s. : 3.0	rack travel mm : 12.15 Tolerance mm : +- 0.05
RATED SPEED	Rated speed rpm : 1800 rack travel mm : 11.90 Tolerance mm : + 0.10
control lever position degree : 50.0 rack travel mm : 8.90	Rated speed rpm : 2000 rack travel mm : 11.80 Tolerance mm : + 0.10
Rated speed rpm : 2200	
rack travel mm : 0.50 + O.50 + O.50	ADJUSTMENT TEST ADA/ALDA SETTING
Rated speed rpm : 2550	Rated speed rpm : 1000
SET IDLE CONTROL LEVER POSITION	Ref. pressure ALDA / ADA hPa : 940

rack travel mm Tolerance mm		STARTING FUEL DELIVERY
MEASUREMENT Rated speed rpm Ref. pressure	: 1000	Rated speed rpm : 100 rack travel mm : 21.60 Tolerance mm : +- 1.50
ALDA / ADA hPa rack travel mm Tolerance mm	: -0.40	+ Del. quantity + cm3/1000 strokes : 59.0 + Tolerance
Rated speed rpm Ref. pressure ALDA / ADA hPa rack travel mm Tolerance mm	: 750	- cm3/1000 strokes : +- 4.0 - Check tolerance - cm3/1000s. : +- 5.0 - Spreed - Tolerance - cm3/1000 strokes : 6.0
		Check tolerance cm3/1000s. : 6.0
FUEL DELIVERY CHA	ARACTERISTICS	-
Ref. pressure ALDA / ADA hPa Rated speed rpm Del. quantity	: 1100 : 1800	LOW IDLE Del. quantity
cm3/1000 strokes Tolerance		+ cm3/1000 strokes : 7.8 + Check tolerance
cm3/1000 strokes Check tolerance cm3/1000s.		cm3/1000s. : + 2.3 + Spreed + Check tolerance
Spreed Tolerance cm3/1000 strokes	. 25	+ cm3/1000s. : 1.5
Check tolerance cm3/1000s.		<u> </u>
Ref. pressure ALDA / ADA hPa		Grad : > 47.00
Rated speed rpm Spreed Del. quantity	: 2000	Grad : < 44.50
cm3/1000 strokes Tolerance cm3/1000 strokes		SETTING PNEUMATIC FAST IDLE (ELA)
Check tolerance cm3/1000s. Spreed		control lever position degree : 14.0 tolerance degree : +- 2.0
Tolerance cm3/1000 strokes	: 2.5	Rated speed rpm : 425
Check tolerance cm3/1000s.	: 3.0	Rack travel in mm: 7.30 Tolerance mm: + 0.80 Del. quantity
HIGH IDLE		+ cm3/1000 strokes : 16.0 + Tolerance + cm3/1000 strokes : + 3.5
Ref. pressure ALDA / ADA hPa	: 1100	Check tolerance cm3/1000s. : +- 4.5

SETTING/TESTING ELECTRONIC IDLE REGULATION (ELR)

control lever

position degree : 14.0 tolerance degree : + 2.0

control lever

position degree : 50.0

ADJUSTMENT

control lever

position degree : 50.0

TESTING PNEUMATIC SHUTOFF DEVICE

Rated speed rpm : 375

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

Edition : 07.03.96 : ISO 4113 Test oil

Combination No. : 0 400 074 886

Injection pump

Pump designation : PES4M55C32ORS167 EP type number : 0 410 054 960

Governor

Governer design. : RSF375/2000M55-7 : 0 420 021 268 Governer no.

Cust. part No.

Customer-spec. information Customer : DPICO

: 0M601-2.3L Motor Power KW : 58.0

TEST BENCH REQUIREMENTS

Test oil inlet

temp. °C 40 Tolerance °C : +- 2.0

Overflow valve : 1 469 990 351

Inlet press. bar : 1.0

Test nozzle holde

: 1 688 901 111 assembly

Opening pressure

148.5 bar Tolerance bar

Test Lines : 1 680 750 014

Outside diameter : 6.0

2.0 x inside diameter: 600 x Length mm :

REMARKS

(A) INJECTION PUMP SETTING VALUES Set equal delivery quant. per values _____

BEGINNING OF DELIVERY

Test pressure bar: Tolerance bar : +- 1.0

Prestroke mm 2.05 : +- 0.05 Tolerance mm Check

tolerance mm : **←** 0.10

Rack travel in mm: 21.00 Tolerance mm : +- 1.00

Firing order : 1-3-4-2

Phasing : 0-90-180-270

Start of delivery blocking

*NW after s.o.d. : 15.50 Tolerance : +- 0.20 Check

tolerance °NW : + - 0.30

Barrel no. : 1

BASIC SETTING

Rated speed rpm : 1000

Rack travel in mm : 12.15 Tolerance mm : +- 0.05

Del. quantity cm3/1000 strokes : 38.5

Tolerance

cm3/1000 strokes : +- 0.5

Check tolerance

cm3/1000s. : +- 1.5

Spreed

Tolerance

Check tolerance cm3/1000s. : 3.0	CRT mm max. : 1.45
Rated speed rpm : 375 Del. quantity + cm3/1000 strokes : 6.5	LOW IDLE
Tolerance + 0.5 + Spreed + Tolerance + Tol	<pre>control lever position degree : 14.0 tolerance degree : +- 2.0</pre>
cm3/1000 strokes : 1.0	SET IDLE AUXILIARY SPRING
(B) SETTING OF INJECTION PUMP WITH GOVERNOR	Rated speed rpm : 450 rack travel mm : 3.90 Tolerance mm : + 0.10
IDLE STAGE	Load pick-up
Rack travel in mm: 6.25	Rated speed rpm : 250
Tolerance mm : +- 0.25	CRT mm min. : 11.50
FULL LOAD DELIVERY AT FULL LOAD STOP	Rated speed rpm : 1000
Rated speed rpm : 1000	CRT mm max. : 1.45
Ref. pressure ALDA / ADA hPa : - Del. quantity	rack travel mm : 5.20 Rated speed rpm : 375
cm3/1000 strokes : 38.5 Tolerance	
cm3/1000 strokes : + 0.5 + Check tolerance	TORQUE CONTROL
cm3/1000s. : +- 1.5 +- Spreed +- Tolerance +-	Rated speed rpm : 1000 rack travel mm : 12.15 Tolerance mm : + 0.05
cm3/1000 strokes : 2.5 + Check tolerance	Rated speed rpm : 1800
cm3/1000s. : 3.0	rack travel mm : 11.90 Tolerance mm : + 0.10
RATED SPEED	Rated speed rpm : 2000 rack travel mm : 11.80 Tolerance mm : + 0.10
control lever position degree : 50.0	
rack travel mm : 8.90 Rated speed rpm : 2200	FUEL DELIVERY CHARACTERISTICS
rack travel mm : 0.50 Tolerance mm : +- 0.50 Rated speed rpm : 2550	Ref. pressure ALDA / ADA hPa : - Rated speed rpm : 1800 Del. quantity
SET IDLE CONTROL LEVER POSITION	cm3/1000 strokes : 40.8 Tolerance cm3/1000 strokes : +- 0.8
Rated speed rpm : 1000	Check tolerance cm3/1000s. : +- 1.8

Spreed Tolerance cm3/1000 strokes Check tolerance cm3/1000s.	1	Check tolerance cm3/1000s. : 1.5
(110) (000).	. 5.0	
Ref. pressure ALDA / ADA hPa Rated speed rpm Spreed Del. quantity		Grad : > 47.00 Grad : < 44.50
cm3/1000 strokes	: 41.0	
Tolerance cm3/1000 strokes Check tolerance	+	SETTING PNEUMATIC FAST IDLE (ELA)
cm3/1000s. Spreed Tolerance cm3/1000 strokes	: 2.5	control lever position degree : 14.0 tolerance degree : +- 2.0
Check tolerance		Rated speed rpm : 425
cm3/1000s.	: 3.0	Rack travel in mm : 7.30 Tolerance mm : + 0.80 Del. quantity
HIGH IDLE	1	cm3/1000 strokes : 16.0 Tolerance
Ref. pressure ALDA / ADA hPa	: - ‡	cm3/1000 strokes : + 3.5 Check tolerance cm3/1000s. : + 4.5
STARTING FUEL DEL	TVERY 1	Vacuum hPa : 400.0
Rated speed rpm rack travel mm Tolerance mm	: 100 : 21.60	SETTING/TESTING ELECTRONIC IDLE REGULATION (ELR)
Del. quantity cm3/1000 strokes Tolerance cm3/1000 strokes	: + 4.0	control lever position degree : 14.0 tolerance degree : +- 2.0
Check tolerance cm3/1000s.	: + 5.0	and all lane
Spreed Tolerance	†	control lever position degree : 50.0
cm3/1000 strokes	: 6.0	
Check tolerance cm3/1000s.	: 6.0	ADJUSTMENT
(III) 13555.	+	control lever position degree : 50.0
LOW IDLE		TECTIAL DAIGUMATIC CHUTCE DEUTCE
Rated speed rpm	: 375	TESTING PNEUMATIC SHUTOFF DEVICE
rack travel mm Tolerance mm	5.20 : + 0.10	Rated speed rpm : 375
Del. quantity cm3/1000 strokes Check tolerance	: 7.8	
cm3/1000s. Spreed	: + 2.3	
-101 000		

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

: 07.03.96 Edition Test oil : ISO 4113

Combination No. : 0 400 074 889

Injection pump

Pump designation : PES4M55C32ORS172 EP type number : 0 410 054 958

Governor

Governer design. : RSF375/2300M75-2 Governer no. : 0 420 021 166

Cust. part No. :

Customer-spec. information Customer : MB-PKW

: OM601-Mopf II Motor

Power KW : 53.0

TEST BENCH REQUIREMENTS

Test oil inlet

temp. °C Tolerance °C : +- 2.0

Overflow valve : 1 469 990 351

Inlet press. bar : 1.0

Test nozzle holde

: 1 688 901 111 assembly

Opening pressure

: 148.5 bar Tolerance bar : +- 1.5

Test Lines : 1 680 750 014

Outside diameter : 6.0

x inside diameter: 2.0 x length mm : 600

REMARKS

(A) INJECTION PUMP SETTING VALUES Set equal delivery quant. per values _____

BEGINNING OF DELIVERY

Test pressure bar : 26.0 Tolerance bar : + 1.0

Prestroke mm : 1.75
Tolerance mm : + 0.05 Check

tolerance mm : + 0.10

Rack travel in mm : 21.00 Tolerance mm : +- 1.00

Firing order : 1-3-4-2

Phasing : 0-90-180-270

Start of delivery blocking

*NW after s.o.d. : 17.00 : +- 0.20 Tolerance Check

tolerance *NW : +- 0.30

: 1 Barrel no.

BASIC SETTING

Rated speed rpm : 900

Rack travel in mm: 12.35 Tolerance mm : + 0.05

Del. quantity cm3/1000 strokes : 33.5

Tolerance cm3/1000 strokes : +- 0.5

Check tolerance : +- 1.5 cm3/1000s.

Spreed

Tolerance

Maria de la compansión de la compansión de la compansión de la compansión de la compansión de la compansión de	+		
Check tolerance cm3/1000s. :	3.0	SET IDLE CONTROL	LEVER POSITION
Rated speed rpm :	375	Rated speed rpm	: 900
Rack travel in mm : Tolerance mm : + Del. quantity		CRT mm max.	: 1.45
cm3/1000 strokes : Tolerance	+	LOW IDLE	
cm3/1000 strokes : + Spreed Tolerance	- 0.5	control lever position degree	. 1/ 0
cm3/1000 strokes :	1.0	tolerance degree	
(B) SETTING OF INJECT:	ION PUMP	Setting point w/o Rated speed rpm rack travel mm	
IDLE STAGE		SET IDLE AUXILIA	RY SPRING
Rack travel in mm : Tolerance mm : +		Rated speed rpm rack travel mm Tolerance mm	: 450 : 4.70 : +- 0.10
		rack travel mm Rated speed rpm	: 670
FULL LOAD DELIVERY AT	FULL LOAD STOP +	Tolerance 1/min	: +- 50
Rated speed rpm : Ref. pressure	+	Load pick-up	
ALDA / ADA hPa : Del. quantity	+	Rated speed rpm	
cm3/1000 strokes : Tolerance	+	CRT mm min.	
cm3/1000 strokes : + Check tolerance	+	Rated speed rpm	
cm3/1000s. : +-	- 1.5	CRT mm max.	: 1.45
Tolerance cm3/1000 strokes : Check tolerance	2.5	rack travel mm Rated speed rpm	
cm3/1000s. :	3.0		
RATED SPEED		TORQUE CONTROL	
control lever	+	Rated speed rpm rack travel mm Tolerance mm	
•	50.0	Rated speed rpm	
	7.90 2500	rack travel mm Tolerance mm	
	0.50 - 0.50 2950	Rated speed rpm rack travel mm Tolerance mm	: 2300 : 11.40 : +- 0.10

ADJUSTMENT TEST	ADA/A) DA		
ADJUSTINENT TEST A	ADA/ALDA T	HICH THE	
A 117 TO 1 A 1 A 1 A 1 A 1 A 1 A 1 A 1 A 1 A 1	†	HIGH IDLE	
SETTING	†		
	+	Ref. pressure	
Rated speed rpm	: 900 +	ALDA / ADA hPa : 1100	
Pof proceire	<u>1</u>		
ALDA / ADA hPa	. 050		
ALUA / AUA III d	700	OTABTIMO PURI DEL TUERO	
rack travel mm	: -0.10	STARTING FUEL DELIVERY	
Tolerance mm	: + 0.10 +		
	+	Rated speed rpm : 100	
MEASUREMENT	1	rack travel mm : > 20.10	
	1	Del. quantity	
Debed sweed www	- 000		
Rated speed rpm	: 900 +		
Ref. pressure	+	Spreed	
ALDA / ADA hPa	: 900	Tolerance	
rack travel mm	: -0.60	cm3/1000 strokes : 6.0	
Tolerance mm		Check tolerance	
TOTAL GITTE THE)	cm3/1000s. : 6.0	
Dutual available	T	CIID7 10003 0.0	
Rated speed rpm			
Ref. pressure ALDA / ADA hPa	+		
ALDA / ADA hPa	: 750 +		
rack travel mm	: -2.00		
Tolerance mm		LOW IDLE	
rocci di loc limi		COM 17CC	
	Ť	A.1.	
	†	Del. quantity	
		cm3/1000 strokes : 7.8	
FUEL DELIVERY CHA	ARACTERISTICS +	Check tolerance	
	1	cm3/1000s. : +- 2.3	
Ref. pressure	1	Spreed	
Ref. pressure	. 4400		
ALDA / ADA hPa		Check tolerance	
Rated speed rpm	: 1400 +	cm3/1000s. : 1.5	
Del. quantity	+		
cm3/1000 strokes	: 33.8		
Tolerance	1		
cm3/1000 strokes	00		
	: - 0.0		
Check tolerance	†		
cm3/1000S.	: +- 1.8 +	Grad : > 49.00	
Spreed	+		
Tolerance	1	Grad : < 46.50	
cm3/1000 strokes	: 2.5	0100	
Charle to large	· 2.3		
Check tolerance	7.0		
cm3/1000s.	: 3.0 +	SETTING PNEUMATIC FAST IDLE (ELA)	
	+		
Ref. pressure	+		
ALDA / ADA hPa	: 1100	control lever	
	\		
Rated speed rpm	\	position degree : 14.0	
Rated speed rpm Spreed	\		
Rated speed rpm Spreed Del. quantity	: 2300	position degree : 14.0 tolerance degree : + 2.0	
Rated speed rpm Spreed	: 2300	position degree : 14.0	
Rated speed rpm Spreed Del. quantity cm3/1000 strokes	: 2300	position degree : 14.0 tolerance degree : + 2.0	
Rated speed rpm Spreed Del. quantity cm3/1000 strokes Tolerance	: 35.0	position degree : 14.0 tolerance degree : +- 2.0 Rated speed rpm : 425	
Rated speed rpm Spreed Del. quantity cm3/1000 strokes Tolerance cm3/1000 strokes	: 35.0	position degree : 14.0 tolerance degree : + 2.0 Rated speed rpm : 425 Rack travel in mm : 8.90	
Rated speed rpm Spreed Del. quantity cm3/1000 strokes Tolerance cm3/1000 strokes Check tolerance	: 2300 : 35.0 : + 1.0	position degree : 14.0 tolerance degree : + 2.0 Rated speed rpm : 425 Rack travel in mm : 8.90 Tolerance mm : + 0.80	
Rated speed rpm Spreed Del. quantity cm3/1000 strokes Tolerance cm3/1000 strokes Check tolerance cm3/1000s.	: 35.0	position degree : 14.0 tolerance degree : +- 2.0 Rated speed rpm : 425 Rack travel in mm : 8.90 Tolerance mm : +- 0.80 Del. quantity	
Rated speed rpm Spreed Del. quantity cm3/1000 strokes Tolerance cm3/1000 strokes Check tolerance	: 2300 : 35.0 : + 1.0	position degree : 14.0 tolerance degree : +- 2.0 Rated speed rpm : 425 Rack travel in mm : 8.90 Tolerance mm : +- 0.80 Del. quantity cm3/1000 strokes : 17.0	
Rated speed rpm Spreed Del. quantity cm3/1000 strokes Tolerance cm3/1000 strokes Check tolerance cm3/1000s. Spreed	: 2300 : 35.0 : + 1.0	position degree : 14.0 tolerance degree : +- 2.0 Rated speed rpm : 425 Rack travel in mm : 8.90 Tolerance mm : +- 0.80 Del. quantity	
Rated speed rpm Spreed Del. quantity cm3/1000 strokes Tolerance cm3/1000 strokes Check tolerance cm3/1000s. Spreed Tolerance	: 2300 : 35.0 : + 1.0 : + 2.0	position degree : 14.0 tolerance degree : +- 2.0 Rated speed rpm : 425 Rack travel in mm : 8.90 Tolerance mm : +- 0.80 Del. quantity cm3/1000 strokes : 17.0 Tolerance	
Rated speed rpm Spreed Del. quantity cm3/1000 strokes Tolerance cm3/1000 strokes Check tolerance cm3/1000s. Spreed Tolerance cm3/1000 strokes	: 2300 : 35.0 : + 1.0 : + 2.0	position degree : 14.0 tolerance degree : + 2.0 Rated speed rpm : 425 Rack travel in mm : 8.90 Tolerance mm : + 0.80 Del. quantity cm3/1000 strokes : 17.0 Tolerance cm3/1000 strokes : + 3.5	
Rated speed rpm Spreed Del. quantity cm3/1000 strokes Tolerance cm3/1000 strokes Check tolerance cm3/1000s. Spreed Tolerance cm3/1000 strokes Check tolerance	: 2300 : 35.0 : + 1.0 : + 2.0 : 2.5	position degree : 14.0 tolerance degree : + 2.0 Rated speed rpm : 425 Rack travel in mm : 8.90 Tolerance mm : + 0.80 Del. quantity cm3/1000 strokes : 17.0 Tolerance cm3/1000 strokes : + 3.5 Check tolerance	
Rated speed rpm Spreed Del. quantity cm3/1000 strokes Tolerance cm3/1000 strokes Check tolerance cm3/1000s. Spreed Tolerance cm3/1000 strokes	: 2300 : 35.0 : + 1.0 : + 2.0	position degree : 14.0 tolerance degree : + 2.0 Rated speed rpm : 425 Rack travel in mm : 8.90 Tolerance mm : + 0.80 Del. quantity cm3/1000 strokes : 17.0 Tolerance cm3/1000 strokes : + 3.5	

Vacuum hPa : 400.0

SETTING/TESTING ELECTRONIC IDLE REGULATION (ELR)

control lever

position degree : 14.0 tolerance degree : + 2.0

control lever

position degree : 50.0

ADJUSTMENT

control lever

position degree : 50.0

Rated speed rpm : 900 rack travel mm : -1.70

Tolerance mm : +- 0.15

TESTING PNEUMATIC SHUTOFF DEVICE

Rated speed rpm : 375

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

: 06,03,96 Edition Test oil : ISO 4113

Combination No. : 0 400 075 920

Injection pump

Pump designation : PES5M55C32ORS189 EP type number : 0 410 055 953

Governor

Governer design. : RSF385/2000M83 Governer no. : 0 420 021 284

Cust. part No. :

Customer-spec. information

Customer : DPICO

Motor : OM 602 2,9ltr

Power KW : 70.0

TEST BENCH REQUIREMENTS

Test oil inlet

temp. °C Tolerance °C : +- 2.0

Overflow valve : 1 469 990 351

Inlet press. bar : 1.0

Test nozzle holde

: 1 688 901 111 assembly

Opening pressure

148.5 bar : +- 1.5 Tolerance bar

Test lines : 1 680 750 014

Outside diameter : 6.0

x inside diameter: 2.0 x Length mm : 600

REMARKS

(A) INJECTION PUMP SETTING VALUES Set equal delivery quant. per values _____

BEGINNING OF DELIVERY

Test pressure bar : 26.0 Tolerance bar : + 1.0

Prestroke mm : 2.05 Tolerance mm : +- 0.05

Check

: + - 0.10tolerance mm

Rack travel in mm: 21.00 Tolerance mm : +- 1.00

Firing order : 1-2-4-5-3

Phasing : 0-72-144-216-288

Start of delivery blocking

*NW after s.o.d. : 15.50 : +- 0.20 Tolerance Check

: + - 0.30tolerance °NW

Barrel no. : 1

BASIC SETTING

Rated speed rpm : 1000

Rack travel in mm: 12.15 : +- 0.05 Tolerance mm

Del. quantity cm3/1000 strokes : 38.0

Tolerance cm3/1000 strokes : + 0.5

Check tolerance

cm3/1000s. : +- 1.5

Spreed Tolerance

Check tolerance cm3/1000s. : 3.0	Rated speed rpm : 1000
	+ Rated speed rpm : 1000
Rated speed rpm : 385	+ CRT mm max. : 1.45
Rack travel in mm : 5.90 Tolerance mm : + 0.10	LOW IDLE
Del. quantity cm3/1000 strokes : 9.5	1
Tolerance	T control lever
cm3/1000 strokes : +- 0.5	position degree : 12.5
Spreed	tolerance degree : + 2.0
Tolerance : 1.0	Setting point w/out bumper spring
	+ Rated speed rpm : 385 + rack travel mm : 5.90
(B) SETTING OF INJECTION PUMP	rack travet mm : 5.90
WITH GOVERNOR	SET IDLE AUXILIARY SPRING
	Rated speed rpm : 500
IDLE STAGE	rack travel mm : 4.00 Tolerance mm : + 0.10
	Tolerance mm : + 0.10
Rack travel in mm : 6.25 Tolerance mm : + 0.15	Load pick-up
TOTAL TOTAL	Rated speed rpm : 250
FULL LOAD DELIVERY AT FULL LOAD STOP	CRT mm min. : 13.00
Rated speed rpm : 1000 Ref. pressure	Rated speed rpm : 1000
ALDA / ADA hPa : 1100	CRT mm max. : 1.45
Del. quantity cm3/1000 strokes : 38.0	rack travel mm : 5.90
Tolerance	Rated speed rpm : 385
cm3/1000 strokes : +- 0.5	+
Check tolerance cm3/1000s. : +- 1.5	†
cm3/1000s. : +- 1.5 Spreed	TORQUE CONTROL
Tolerance	Tongo sommor
cm3/1000 strokes : 2.5	Rated speed rpm : 1000
Check tolerance	+ rack travel mm : 12.15
cm3/1000s. : 3.0	Tolerance mm : + 0.05
	Rated speed rpm : 2000
RATED SPEED	+ rack travel mm : 12.15
	Tolerance mm : + 0.10
control lever	
position degree : 50.0	ADJUSTMENT TEST ADA/ALDA
rack travel mm : 7.60	SETTING
Rated speed rpm : 2250	+
0.50	Rated speed rpm : 1000
rack travel mm : 0.50 Tolerance mm : +- 0.50	+ Ref. pressure + ALDA / ADA hPa : 940
Rated speed rpm : 2550	+ rack travel mm : -0.10
nated opera i più	+ Tolerance mm : + 0.10
OFT TOLE CONTROL LEVED DOCTTON	MEACUPEMENT
SET IDLE CONTROL LEVER POSITION	+ MEASUREMENT

Dated speed page	: 1000	†
Rated speed rpm Ref. pressure	. 1000	LOW IDLE
ALDA / ADA hPa		+
rack travel mm	: -0.40	+ Rated speed rpm : 385
Tolerance mm	: +- 0.10	rack travel mm : 5.90
Rated speed rpm	: 1000	Tolerance mm : + 0.10 Del. quantity
Ref. pressure	. 1000	- cm3/1000 strokes : 9.5
ALDA / ADA hPa	: 750	+ Check tolerance
rack travel mm	: -1.50	+ cm3/1000s. : +- 2.3
Tolerance mm	: +- 0.20	+ Spreed
		+ Check tolerance + cm3/1000s. : 1.5
		+
FUEL DELIVERY CHA	ARACTERISTICS	İ
Ref. pressure		1
ALDA / ADA hPa	: 1100	+
Rated speed rpm	: 2000	+ Grad : > 47.00
Del. quantity cm3/1000 strokes	. 41 5	Grad : < 44.50
Tolerance	• • • • • •	+ uiau
cm3/1000 strokes	: + 1.0	+
Check tolerance		+ SETTING PNEUMATIC FAST IDLE (ELA)
cm3/1000s.	: + 2.0	†
Spreed Tolerance		control lever
cm3/1000 strokes	: 2.5	position degree : 12.5
Check tolerance		+ tolerance degree : + 2.0
cm3/1000s.	: 3.0	Poted aread area. (00
		Rated speed rpm : 400
***************************************		+ Rack travel in mm: 8.90
HIGH IDLE		+ Tolerance mm : + 0.80
Dof managemen		+ Del. quantity
Ref. pressure ALDA / ADA hPa	: 1100	+ cm3/1000 strokes : 22.5 + Tolerance
ALUA / AUA III d	. 1700	+ cm3/1000 strokes : + 3.5
		+ Check tolerance
STARTING FUEL DEL	LIVERY	+ cm3/1000s. : + 4.5
Rated speed rpm	: 100	† Vacuum hPa : 400.0
rack travel mm	: 21.60	
Tolerance mm	: + 1.50	+ SETTING/TESTING ELECTRONIC IDLE
Del. quantity	40.77	+ REGULATION (ELR)
cm3/1000 strokes Tolerance	: 60.3	†
cm3/1000 strokes	: +- 4.0	T control lever
Check tolerance		+ position degree : 12.5
cm3/1000s.	: +- 5.0	+ tolerance degree : +- 2.0
Spreed		1
Tolerance cm3/1000 strokes	: 6.0	t control lever
Check tolerance		position degree : 50.0
cm3/1000s.	: 6.0	
		† ADJUSTMENT
		T control lever
		position degree : 50.0

TESTING PNEUMATIC SHUTOFF DEVICE

Rated speed rpm : 385

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

: 07.03.96 Edition : ISO 4113 Test oil

Combination No. : 0 400 075 921

Injection pump

Pump designation : PES5M55C32ORS189 EP type number : 0 410 055 953

Governor

Governer design. : RSF385/2000M81 Governer no. : 0 420 021 282

Cust. part No. :

Customer-spec. information

Customer : DPICO

Motor : OM 602 2,9ltr

Power KW : 70.0

TEST BENCH REQUIREMENTS

Test oil inlet

temp. °C Tolerance °C 2.0

Overflow valve : 1 469 990 351

Inlet press. bar : 1.0

Test nozzle holde

: 1 688 901 111 assembly

Opening pressure

148.5 bar Tolerance bar : +- 1.5

Test Lines : 1 680 750 014

Outside diameter : 6.0

x inside diameter : 2.0 x Length mm : 600

REMARKS

(A) INJECTION PUMP SETTING VALUES Set equal delivery quant. per values _____

BEGINNING OF DELIVERY

Test pressure bar : 26.0 Tolerance bar : + 1.0

2.05 Prestroke mm : +- 0.05 Tolerance mm Check

tolerance mm : +- 0.10

Rack travel in mm : 21.00 Tolerance mm : + 1.00

Firing order : 1-2-4-5-3

Phasing : 0-72-144-216-288

Start of delivery blocking

*NW after s.o.d. : 15.50 Tolerance : +- 0.20

Check

tolerance °NW : + 0.30

Barrel no. : 1

BASIC SETTING

Rated speed rpm : 1000

Rack travel in mm : 12.15 Tolerance mm : \leftarrow 0.05

Del. quantity cm3/1000 strokes : 38.0

Tolerance

cm3/1000 strokes : +- 0.5

Check tolerance cm3/1000s.

: +- 1.5

Spreed Tolerance

Check tolerance cm3/1000s. : 3.0	+ Rated speed rpm : 1000
Rated speed rpm : 385	+ CRT mm max. : 1.45
Rack travel in mm: 5.90 Tolerance mm: + 0.10 Del. quantity	LOW IDLE
cm3/1000 strokes : 9.5 Tolerance cm3/1000 strokes : +- 0.5	control lever position degree : 14.0
Spreed Tolerance cm3/1000 strokes : 1.0	tolerance degree : +- 2.0 Setting point w/out bumper spring Rated speed rpm : 385
(B) SETTING OF INJECTION PUMP WITH GOVERNOR	rack travel mm : 5.90 SET IDLE AUXILIARY SPRING
IDLE STAGE	Rated speed rpm : 500 rack travel mm : 4.00 Tolerance mm : +- 0.10
Rack travel in mm: 6.25 Tolerance mm: + 0.25	Load pick-up
	Rated speed rpm : 250
FULL LOAD DELIVERY AT FULL LOAD STOP	CRT mm min. : 12.00
Rated speed rpm : 1000 Ref. pressure	Rated speed rpm : 1000
ALDA / ADA hPa : - Del. quantity	- CRT mm max. : 1.45
cm3/1000 strokes : 38.0 Tolerance cm3/1000 strokes : + 0.5	rack travel mm : 5.90 Rated speed rpm : 385
Check tolerance cm3/1000s. : +- 1.5	TODOUS CONTROL
Spreed Tolerance	+ TORQUE CONTROL
cm3/1000 strokes : 2.5 Check tolerance cm3/1000s. : 3.0	+ Rated speed rpm : 1000 + rack travel mm : 12.15 + Tolerance mm : + 0.05
RATED SPEED	Rated speed rpm : 2000 rack travel mm : 12.15 Tolerance mm : + 0.10
control lever position degree : 50.0	+
rack travel mm : 7.60 Rated speed rpm : 2250	FUEL DELIVERY CHARACTERISTICS
rack travel mm : 0.50 Tolerance mm : + 0.50 Rated speed rpm : 2550	Ref. pressure ALDA / ADA hPa : - Rated speed rpm : 2000 Del. quantity cm3/1000 strokes : 41.5
SET IDLE CONTROL LEVER POSITION	Tolerance cm3/1000 strokes : +- 1.0

Check tolerance cm3/1000s. Spreed Tolerance cm3/1000 strokes Check tolerance		control lever position degree : 14.0 tolerance degree : + 2.0 Rated speed rpm : 400
cm3/1000s.	: 3.0	Rack travel in mm : 8.90 Tolerance mm : + 0.80
HIGH IDLE		- + Del. quantity + cm3/1000 strokes : 22.5 + Tolerance
Ref. pressure ALDA / ADA hPa	; -	cm3/1000 strokes : + 3.5 Check tolerance cm3/1000s. : + 4.5 Vacuum hPa : 400.0
STARTING FUEL DEL	.IVERY	- + vacuum nea : 400.0
Rated speed rpm rack travel mm Tolerance mm Del. quantity	: 100 : 21.60 : + 1.50	SETTING/TESTING ELECTRONIC IDLE REGULATION (ELR)
cm3/1000 strokes Tolerance cm3/1000 strokes Check tolerance	: +- 4.0	control lever position degree : 14.0 tolerance degree : +- 2.0
cm3/1000s. Spreed Tolerance		control lever position degree : 50.0
cm3/1000 strokes Check tolerance		ADJUSTMENT
cm3/1000S.	: 6.0	control lever position degree : 50.0
LOW IDLE		TESTING PNEUMATIC SHUTOFF DEVICE
Rated speed rpm rack travel mm Del. quantity	: 5.90	Rated speed rpm : 385
cm3/1000 strokes Check tolerance		
cm3/1000S. Spreed Check tolerance	: +- 2.3	+ End of test specification sheet
cm3/1000s.	: 1.5	+
		-
Grad	: > 47.00	<u> </u>
Grad	: < 44.50	+
SETTING PNEUMATIC	FAST IDLE (ELA)	-

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

Edition : 07.03.96 Test oil : ISO 4113

Combination No. : 0 400 075 923

Injection pump

Pump designation : PES5M55C32ORS168 EP type number : 0 410 055 978

Governor

Governer design. : RSF350/2000M55-8 Governer no. : 0 420 021 269

Cust. part No. :

Customer-spec. information Customer : DPICO

Motor : 0M602-2.9l Power KW : 69.0

TEST BENCH REQUIREMENTS

Test oil inlet

temp. °C : 40
Tolerance °C : +- 2.0

Overflow valve : 1 469 990 351

Inlet press. bar : 1.0

Test nozzle holde

assembly : 1 688 901 111

Opening pressure

bar : 148.5 Tolerance bar : + 1.5

Test Lines : 1 680 750 014

Outside diameter : 6.0

x inside diameter: 2.0 x length mm : 600

REMARKS

(A) INJECTION PUMP SETTING VALUES Set equal delivery quant. per values _____

BEGINNING OF DELIVERY

Test pressure bar : 26.0 Tolerance bar : + 1.0

Prestroke mm : 2.05
Tolerance mm : + 0.05
Check

tolerance mm : + 0.10

Rack travel in mm : 21.00 Tolerance mm : + 1.00

Firing order : 1-2-4-5-3

Phasing : 0-72-144-216-288

Start of delivery blocking

*NW after s.o.d. : 15.50 Tolerance : + 0.20 Check

tolerance °NW : + 0.30

Barrel no. : 1

BASIC SETTING

Rated speed rpm : 1000

Rack travel in mm : 12.15 Tolerance mm : + 0.05

Del. quantity cm3/1000 strokes : 38.5

Tolerance cm3/1000 strokes : + 0.5

Check tolerance cm3/1000s. : + 1.5

Spreed Tolerance

Check tolerance 3.0 cm3/1000s. Rated speed rpm 1000 350 : 1.45 Rated speed rpm CRT mm max. Rack travel in mm: : **←** 0.10 Tolerance mm LOW IDLE Del. quantity cm3/1000 strokes : control lever Tolerance cm3/1000 strokes : +-0.5 position degree : 14.0 Spreed 2.0 tolerance degree : +-Tolerance cm3/1000 strokes : 1.0 Setting point w/out bumper spring Rated speed rpm : 350 rack travel mm (B) SETTING OF INJECTION PUMP SET IDLE AUXILIARY SPRING WITH GOVERNOR 450 Rated speed rpm IDLE STAGE rack travel mm 4.10 Tolerance mm : + 0.10Rack travel in mm : 6.25 Load pick-up Tolerance mm 0.25 250 Rated speed rpm FULL LOAD DELIVERY AT FULL LOAD STOP 10.50 CRT mm min. 1000 Rated speed rom 1000 Rated speed rpm : Ref. pressure 1.45 CRT mm max. ALDA / ADA hPa : Del. quantity 38.5 5.30 cm3/1000 strokes : rack travel mm : 350 Rated speed rpm Tolerance 0.5 cm3/1000 strokes : +-Check tolerance cm3/1000s. 1.5 TORQUE CONTROL Spreed Tolerance 2.5 1000 cm3/1000 strokes : Rated speed rpm Check tolerance rack travel mm 12.15 cm3/1000s. 3.0 Tolerance mm : + - 0.05Rated speed rpm 1800 : RATED SPEED rack travel mm 12.00 : Tolerance mm : +- 0.102000 control lever Rated speed rpm 11.80 position degree 50.0 rack travel mm Tolerance mm : + - 0.108.90 rack travel mm Rated speed rpm 2200 0.50 rack travel mm : + - 0.50FUEL DELIVERY CHARACTERISTICS Tolerance mm 2550 Rated speed rpm Ref. pressure ALDA / ADA hPa 1800 SET IDLE CONTROL LEVER POSITION Rated speed rpm :

Del. quantity cm3/1000 strokes	,	+ Check tolerance + cm3/1000s. : +- 2.3
Tolerance		+ Spreed
cm3/1000 strokes Check tolerance		+ Check tolerance + cm3/1000s. : 1.5
cm3/1000s. Spreed	: + 1.8	
Tolerance cm3/1000 strokes	: 2.5	
Check tolerance		Ŧ
cm3/1000s.	: 3.0	+ Grad :> 47.00
Ref. pressure	•	Grad : < 44.50
ALDA / ADA hPa Rated speed rpm		
Spreed Del. quantity		SETTING PNEUMATIC FAST IDLE (ELA)
cm3/1000 strokes	: 41.0	-
Tolerance cm3/1000 strokes	. + 10	t control lever position degree : 14.0
Check tolerance		tolerance degree : + 2.0
cm3/1000s. Spreed	: ← 2.0	+ Rated speed rpm : 400
Tolerance		+
cm3/1000 strokes	: 2.5	Rack travel in mm: 6.10 Tolerance mm: + 0.80
Check tolerance cm3/1000s.	: 3.0	+ Del. quantity
		+ cm3/1000 strokes : 11.0
		+ Tolerance + cm3/1000 strokes : +- 3.5
HIGH IDLE		+ Check tolerance
Ref. pressure		+ cm3/1000S. : +- 4.5 + Vacuum hPa : 400.0
ALDA / ADA hPa	: -	
		SETTING/TESTING ELECTRONIC IDLE
STARTING FUEL DEL	LIVERY	REGULATION (ELR)
Rated speed rpm		+
rack travel mm Tolerance mm		+ control lever + position degree : 14.0
Del. quantity		tolerance degree : + 2.0
cm3/1000 strokes Tolerance	: 59.0	‡
cm3/1000 strokes	: +- 4.0	control lever
Check tolerance cm3/1000s.	: + 5.0	position degree : 50.0
Spreed		ADJUSTMENT
Tolerance cm3/1000 strokes	: 6.0	t control lever
Check tolerance	•	position degree : 50.0
cm3/1000s.	: 6.0	<u> </u>
		TESTING PNEUMATIC SHUTOFF DEVICE
104 701 5		}
LOW IDLE	- -	Rated speed rpm : 350
Del. quantity cm3/1000 strokes	: 7.8	+

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

Edition : 08.03.96 Test oil : ISO 4113

Combination No. : 0 401 846 859

Injection pump

Pump designation : PE6P12DA32DRS3196Q EP type number : 0 411 826 776

Governor

Governer design. : RQV200/1100PA729-1 Governer no. : 0 421 813 470

Cust. part No. : 394505

Customer—spec. information Customer : SCANIA Motor : DS9 08

TEST BENCH REQUIREMENTS

Inlet line : 3.1

Vibration damper

(RoBo diaphragm) : 4.2

Test oil inlet

temp. °C : 40
Tolerance °C : +- 2.0

Overflow valve : 1 417 413 025

Inlet press. bar : 1.5
Tolerance bar : + 0.1

Test nozzle holde

assembly : 1 688 901 019

Opening pressure

bar : 208.5 Tolerance bar : + 1.5 Test lines : 1 680 750 089

Outside diameter : 8.0

x inside diameter: 3.0 x Length mm : 600

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant.

per values _____

BEGINNING OF DELIVERY

Test pressure bar : 26.0 Tolerance bar : + 1.0

Prestroke mm : 5.05
Tolerance mm : + 0.05
Check

tolerance mm

Rack travel in mm : 10.50

Tolerance mm : +- 1.50

Firing order : 1-5-3-6-2-

: 4

Phasing : 0-60-120-180-240

: -300

: + 0.10

Tolerance : \leftarrow 0.30

Check

tolerance °NW : +- 0.50

Start of delivery mark

Tolerance : \leftarrow 0.50

Check

tolerance °NW : + 0.75

Barrel no. : 1

BASIC SETTING

Rated speed rpm : 700

Rack travel in mm : 10.05
Tolerance mm : + 0.05

Del. quantity cm3/1000 strokes : 125.0 Tolerance	guide sleeve travel mm : 11.50 Tolerance mm : + 0.50
cm3/1000 strokes : + 1.0	GUIDE SLEEVE POSITION
Check tolerance cm3/1000S. : +- 4.0	Rated speed rpm : 1315
Spreed Tolerance cm3/1000 strokes : 5.0	Rack travel in mm: 9.00 Tolerance mm: + 1.30
Check tolerance cm3/1000s. : 8.0	FULL LOAD DELIVERY AT FULL LOAD STOP
Rated speed rpm : 225	Rated speed rpm : 700 Aneroid pressure
Rack travel in mm: 5.20 Tolerance mm: + 0.30	hPa : - Del. quantity cm3/1000 strokes : 125.0
Del. quantity cm3/1000 strokes : 24.0	Tolerance cm3/1000 strokes : +- 1.0 Check tolerance
cm3/1000 strokes : + 3.0 Check tolerance cm3/1000s. : + 6.0	cm3/1000s. : +- 4.0 Spreed Tolerance
Spreed Tolerance	cm3/1000 strokes : 5.0 Check tolerance
cm3/1000 strokes : 3.0 + Check tolerance	cm3/1000s. : 8.0
cm3/1000s. : 6.0	
(B) SETTING OF INJECTION PUMP WITH GOVERNOR	control lever position degree : 59.0
GUIDE SLEEVE TRAVEL	tolerance degree : +- 4.0
Rated speed rpm : 225 + guide sleeve + travel mm : 0.65 +	control lever position degree : 115.0 tolerance degree : +- 4.0
travel mm : 0.65 Tolerance mm : + 0.20	RATED SPEED
Rated speed rpm : 1155 guide sleeve travel mm : 8.50 Tolerance mm : + 0.15	rack travel mm : 9.00 Rated speed rpm : 1145 Tolerance 1/min : + 5
Rated speed rpm : 719 guide sleeve	rack travel mm : 4.00 Rated speed rpm : 1250 Tolerance 1/min : +- 15
travel mm : 5.54 Tolerance mm : + 0.25	rack travel mm : 0.50
Rated speed rpm : 430 guide sleeve	Tolerance mm : +- 0.50 Rated speed rpm : 1350
travel mm : 3.90 Tolerance mm : + 0.25	LOW IDLE
Rated speed rpm : 1440	TOM INTE

control lever position degree tolerance degree	: 63.0 : + 4.0	
control lever position degree tolerance degree	: 9.0 : +- 4.0	
Testing:		
Rated speed rpm rack travel mm Tolerance mm	: 225 : 5.20 : + 0.10	
Rated speed rpm	: 125	
CRT mm min.	: > 6.20	
Rated speed rpm	: 330	
TORQUE CONTROL		
Rated speed rpm rack travel mm Tolerance mm	: 700 : 10.05 : ← 0.05	
Rated speed rpm rack travel mm Tolerance mm	: 1100 : 10.05 : ← 0.05	
FUEL DELIVERY CHA	RACTERISTICS	
Aneroid pressure	•	
hPa Rated speed rpm	1100	
Del. quantity cm3/1000 strokes	: 140.0	
Tolerance cm3/1000 strokes	: + 4.0	
Check tolerance cm3/1000s.	: +- 6.0	
BREAKAWAY		
Rack travel in mm Rated speed rpm Tolerance 1/min		
STARTING FUEL DELIVERY		

:		100
-		20.50
•	+	0.50
		355.0
•		3)).0
:	+-	20.0
		2/ 0
:	+-	∠4.Ū
	•	•

LOW IDLE

Rated speed rpm rack travel mm Tolerance mm	:	-	225 5.20 0.30
Del. quantity cm3/1000 strokes	:		24.0
Tolerance cm3/1000 strokes	; 4		3.0
Check tolerance cm3/1000s.	: 4	-	6.0
Spreed Tolerance cm3/1000 strokes			3.0
Check tolerance	•		
cm3/1000s.	:		6.0

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

Edition : 07.03.96 Test oil : ISO 4113

Combination No. : 0 401 856 700

Injection pump

Pump designation : PE6P110A721RS3101 EP type number : 0 411 816 725

Governor

Governer design. : RQ300/1200PA412 Governer no. : 0 421 801 172

Cust. part No.

Customer—spec. information Customer : SNF Motor : WD615.67

Power KW : 206.0

TEST BENCH REQUIREMENTS

Inlet line : 4.1

Test oil inlet

temp. °C : 40
Tolerance °C : + 2.0

Overflow valve : 1 417 413 025

Inlet press. bar : 1.5

Test nozzle holde

assembly : 0 681 343 009

Opening pressure

bar : 173.5 Tolerance bar : + 1.5

Test lines : 1 680 750 089

Outside diameter : 8.0

x inside diameter : 3.0 x length mm : 600

REMARKS

(A) INJECTION PUMP SETTING VALUES Set equal delivery quant.

per values _____

BEGINNING OF DELIVERY

Test pressure bar : 26.0 Tolerance bar : + 1.0

Prestroke mm : 2.85
Tolerance mm : + 0.05
Check

tolerance mm : + 0.10

Rack travel in mm : 10.50

Tolerance mm : + 1.50

Firing order : 1-5-3-6-2-

Phasing : 0-60-120-180-240

: -300 Tolerance : + 0.35

Check

tolerance "NW : + 0.75

Start of delivery mark

Barrel no. : 1

BASIC SETTING

Rated speed rpm : 1200

Rack travel in mm : 12.05 Tolerance mm : + 0.05

Del. quantity cm3/1000 strokes : 163.0

Tolerance cm3/1000 strokes : +- 1.0

Check tolerance cm3/1000s. : +- 4.0

1	
Spreed Tolerance cm3/1000 strokes : 4.0	control lever position degree : 40.0 tolerance degree : +- 4.0
	toterance degree . +- 4.0
Check tolerance cm3/1000s. : 7.5	RATED SPEED
Rated speed rpm : 300	rack travel mm : 11.00 Rated speed rpm : 1253 Tolerance 1/min : +- 8
Rack travel in mm: 6.00 Tolerance mm: + 0.20	rack travel mm : 4.00
Del. quantity cm3/1000 strokes : 15.0	Rated speed rpm : 1340 Tolerance 1/min : + 15
Tolerance cm3/1000 strokes : + 3.0	rack travel mm : 0.75
Check tolerance cm3/1000s. : + 5.5	Tolerance mm : +- 0.75 Rated speed rpm : 1450
Spreed + Tolerance + cm3/1000 strokes : 4.5	
cm3/1000 strokes : 4.5 + Check tolerance + cm3/1000s. : 7.5 +	LOW IDLE
(B) SETTING OF INJECTION PUMP	control lever position degree : 14.0
WITH GOVERNOR	tolerance degree : +- 4.0
	Testing:
GUIDE SLEEVE POSITION	Rated speed rpm : 300 rack travel mm : 6.00
Rated speed rpm : 600	Tolerance mm : +- 0.10
Rack travel in mm: 16.00	rack travel mm : 2.00
Tolerance mm : + 0.60	Rated speed rpm : 425 Tolerance 1/min : +- 20
FULL LOAD DELIVERY AT FULL LOAD STOP	Rated speed rpm : 100
Rated speed rpm : 1200 Aneroid pressure	CRT mm min. : > 7.50
hPa : 700	TORQUE CONTROL
Del. quantity + cm3/1000 strokes : 163.0 +	TORGOE CONTROL
Tolerance +	Dimension a mm : 0.35
cm3/1000 strokes : + 1.0 + Check tolerance	Rated speed rpm : 1200 rack travel mm : 12.05
cm3/1000s. : +- 4.0	Tolerance mm : + 0.05
Spreed	
Tolerance +	Rated speed rpm : 700 rack travel mm : 12.45
cm3/1000 strokes : 4.0 + Check tolerance	rack travel mm : 12.45 Tolerance mm : +- 0.05
cm3/1000s. : 7.5	
†	Rated speed rpm : 1075 rack travel mm : 12.30
	rack travel mm : 12.30 Tolerance mm : +- 0.15
CONTROL LEVER	
‡	Rated speed rpm : 600 rack travel mm : 12.75

Tolerance mm	: + 0.20
ANEROID/ALTITUDE COMPENSATOR TEST	
SETTING	
Rated speed rpm Pressure hPa rack travel mm Tolerance mm	: 500 : 700 : 12.45 : ← 0.05
MEASUREMENT	
Pressure hPa Rated speed rpm rack travel mm Tolerance mm	500 : 10.20 : + 0.10
Rated speed rpm	: 500
Pressure hPa rack travel mm Tolerance mm	: 420 : 11.55 : ← 0.05
Pressure hPa rack travel mm Tolerance mm	: 330 : 10.35 : ← 0.15
FUEL DELIVERY CHA	
nPa Rated speed rpm	: 700 : 700
Del. quantity	
cm3/1000 strokes	: 167.0
cm3/1000 strokes Tolerance cm3/1000 strokes	: 167.0 : +- 2.0
cm3/1000 strokes Tolerance cm3/1000 strokes Check tolerance cm3/1000s.	

Rack travel in mm: 11.00
Rated speed rpm: 1253
Tolerance 1/min: + 8

STARTING FUEL DELIVERY

Rated speed rpm : 100
rack travel mm : 20.50
Tolerance mm : + 0.50
Del. quantity
cm3/1000 strokes : 220.0
Tolerance
cm3/1000 strokes : + 15.0
Check tolerance
cm3/1000s. : + 19.0

LOW IDLE

Rated speed rpm : 300 6.00 rack travel mm Tolerance mm : + 0.20Del. quantity cm3/1000 strokes : 15.0 Tolerance cm3/1000 strokes : +-3.0 Check tolerance cm3/1000s. 5.5 Spreed Tolerance cm3/1000 strokes : 4.5 Check tolerance 7.5 cm3/1000s.

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

: 12.03.96 Edition Test oil : ISO 4113

Combination No. : 0 402 046 874

Injection pump

Pump designation : PES6P120A720RS3360 EP type number : 0 412 026 785

Governor

Governer design. : RQV300...1100PA1254K

Governer no. : 0 421 815 485

Cust. part No. :

Customer-spec. information

Customer : IVECO-FRANCE : 8360.46.4107 Motor

Power KW : 198.0

TEST BENCH REQUIREMENTS

Inlet line : 4.2

Test oil inlet

temp. °C Tolerance °C : +- 2.0

Overflow valve : 2 417 413 034

Inlet press. bar : 2.5

Overflow quantity

min. L/h : 105 Tolerance L/h : +- 10.0

Test nozzle holde

: 1 688 901 105 assembly

Opening pressure

208.5 bar Tolerance bar : + 1.5 Test Lines : 1 680 750 089

Outside diameter : 8.0

x inside diameter : 3.0

x length mm : 600

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant.

per values ____

BEGINNING OF DELIVERY

Test pressure bar : Tolerance bar : + 1.0

Prestroke mm : 4.15 Tolerance mm : +- 0.05

Check

: +- 0.10 tolerance mm

Rack travel in mm: 14.00 Tolerance mm : + 0.50

Firing order : 1-5-3-6-2-

Phasing : 0-60-120-180-240

: -300

: +- 0.30 Tolerance

Check

tolerance 'NW : + 0.50

Start of delivery mark

Check

tolerance *NW : +- 0.40

Barrel no. : 1

BASIC SETTING

Rated speed rpm : 1100

	† guide sleeve
Rack travel in mm : 14.05	† travel mm : 13.50
Tolerance mm : +- 0.05	+ Tolerance mm : +- 0.50
	+
Del. quantity	
cm3/1000 strokes : 184.0	+ GUIDE SLEEVE POSITION
	†
Tolerance	+ Rated speed rpm : 1325
cm3/1000 strokes : +- 1.0	+
	+ Rack travel in mm: 10.00
Check tolerance	† Tolerance mm : +- 2.70
cm3/1000s. : +- 4.0	+
	+
Spreed	+ FULL LOAD DELIVERY AT FULL LOAD STOP
Tolerance	+
cm3/1000 strokes : 5.0	+ Rated speed rpm : 1100
	+ Aneroid pressure
Check tolerance	† hPa : 1200
cm3/1000s. : 9.0	+ Del. quantity
	+ cm3/1000 strokes : 184.0
Rated speed rpm : 300	† Tolerance
	+ cm3/1000 strokes : + 1.0
Rack travel in mm : 7.80	+ Check tolerance
Tolerance mm : +- 0.20	+ cm3/1000s. : +- 4.0
Del. quantity	+ Spreed
cm3/1000 strokes : 25.0	† Tolerance
Tolerance	+ cm3/1000 strokes : 5.0
cm3/1000 strokes : +- 3.0	+ Check tolerance
Check tolerance	+ cm3/1000s. : 9.0
cm3/1000s. : +- 6.0	∔
Spreed	•
Tolerance	
cm3/1000 strokes : 8.0	+ CONTROL LEVER
Check tolerance	}
cm3/1000s. : 12.0	+ control lever
	+ position degree : 116.0
	+ tolerance degree : + 4.0
(B) SETTING OF INJECTION PUMP	+
WITH GOVERNOR	+ RATED SPEED
	+
	+ rack travel mm : 13.00
GUIDE SLEEVE TRAVEL	Rated speed rpm : 1145
	+ Tolerance 1/min : + 5
Rated speed rpm : 300	+
guide sleeve	rack travel mm : 4.00
travel mm : 2.68	+ Rated speed rpm : 1260
Tolerance mm : + 0.20	+ Tolerance 1/min : +- 15
	+
Rated speed rpm : 1156	rack travel mm : 0.50
guide sleeve	+ Tolerance mm : + 0.50
travel mm : 9.00	+ Rated speed rpm : 1400
Tolerance mm : + 0.15	+ ' '
	+
Rated speed rpm : 380	
guide sleeve	+ LOW IDLE
travel mm : 3.51	+
Tolerance mm : + 0.25	+
TO THE TOTAL THE TANK TO THE TANK THE T	- control lever
Rated speed rpm : 1450	position degree : 61.0
the same and the s	tolerance degree : + 4.0
	T LUTERANCE DEUREE : TT 4.0

Testing:	
Rated speed rpm rack travel mm Tolerance mm	: 300 : 6.60 : + 0.10
Rated speed rpm	: 225
CRT mm min.	: > 8.10
Rated speed rpm	: 330
TORQUE CONTROL	
Rated speed rpm rack travel mm Tolerance mm	: 1100 : 14.05 : ← 0.05
Rated speed rpm rack travel mm Tolerance mm	: 850 : 14.20 : ← 0.15
Rated speed rpm rack travel mm Tolerance mm	: 700 : 13.55 : ← 0.15
Rated speed rpm rack travel mm Tolerance mm	: 500 : 13.30 : ← 0.20
ANEROID/ALTITUDE COMPENSATOR TEST	
SETTING	
Rated speed rpm Pressure hPa rack travel mm Tolerance mm	: 850 : 1200 : 14.20 : ← 0.15
MEASUREMENT	
Pressure hPa Rated speed rpm rack travel mm Tolerance mm	850 10.80 + 0.20
Rated speed rpm	: 850
Pressure hPa rack travel mm Tolerance mm	: 640 : 13.10 : +- 0.20
Pressure hPa rack travel mm Tolerance mm	: 380 : 11.60 : + 0.05

START CUT-OUT	
Rated speed rpm Rated speed rpm	: > 200 : < 220
Check speed 1/min Check	: > 180
speed 1/min	: < 240
FUEL DELIVERY CHAR	ACTERISTICS
Aneroid pressure	4000
hPa Rated speed rpm Del. quantity	: 1200 : 700
cm3/1000 strokes Tolerance	: 182.0
cm3/1000 strokes Check tolerance	: +- 3.0
cm3/1000s.	: +- 6.0
Aneroid pressure hPa Rated speed rpm Del. quantity	: 1200 : 500
cm3/1000 strokes Tolerance	: 167.0
cm3/1000 strokes Check tolerance	: +- 3.0
cm3/1000s.	: +- 6.0
Aneroid pressure hPa	: -
Del. quantity	: 500
Tolerance	: 88.0
cm3/1000 strokes Check tolerance cm3/1000s.	: +- 1.0 : +- 4.0
CIIIS/ (UUGS.	4.0
BREAKAWAY	
Rack travel in mm : Rated speed rpm : Tolerance 1/min :	
STARTING FUEL DELIV	/ERY
Rated speed rpm : rack travel mm : Tolerance mm :	100 12.50 +- 0.30

Del. quantity cm3/1000 strokes : 90.0 Tolerance cm3/1000 strokes : +- 15.0 Check tolerance

cm3/1000s. : + 19.0

LOW IDLE

Rated speed rpm 300 7.80 rack travel mm Tolerance mm : +- 0.20 Del. quantity cm3/1000 strokes : 25.0 Tolerance cm3/1000 strokes : + 3.0 Check tolerance cm3/1000s. 6.0 Spreed Tolerance cm3/1000 strokes : 8.0 Check tolerance cm3/1000s. 12.0

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

Edition : 11.03.96 Test oil : ISO 4113

Combination No. : 0 402 046 875

Injection pump

Pump designation : PES6P110A320RS3329Z

EP type number : 0 412 016 744

Governor

Governer design. : RQV325...1250PA1251

Governer no. : 0 421 814 164

Cust. part No. : 1309376/0

Customer-spec. information Customer : DAF : NS156M Motor Power KW : 156.0

TEST BENCH REQUIREMENTS

Inlet line : 3.2

Test oil inlet

temp. °C Tolerance °C : +- 2.0

Overflow valve : 1 417 413 000

Inlet press. bar : 1.5 Tolerance bar : + 0.1

Overflow quantity

min. l/h : 160 Tolerance l/h : + 20.0

Test nozzle holde

: 1 688 901 101 assembly

Opening pressure

Tolerance bar

Test Lines : 1 680 750 008

Outside diameter : 6.0

x inside diameter : 2.0

x length mm : 600

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant.

per values _____

BEGINNING OF DELIVERY

Test pressure bar: 26.0 Tolerance bar : +- 1.0

Prestroke mm : 4.85 Tolerance mm : + 0.05

Check

tolerance mm : \leftarrow 0.10

Rack travel in mm: 20.50 Tolerance mm : + 0.50

Firing order : 1-5- 3- 6- 2-: 4

Phasing : 0-60-120-180-240

: -300

: + 0.30 Tolerance

Check

tolerance "NW : +- 0.50

Start of delivery mark

: + 0.10Tolerance

Check

tolerance *NW : + 0.75

Barrel no. : 1

BASIC SETTING

Rated speed rpm : 1000

Rack travel in mm : 11.85 Tolerance mm : + 0.05

Del. quantity	+	guide sleeve
cm3/1000 strokes :	144.0	travel mm : 13.50
	1	Tolerance mm : +- 0.50
Tolerance		roter drice limit
cm3/1000 strokes :	_ 10 T	
cms/ food strokes :	T 1.0	CUIDE OF EDUC DOOTTON
		GUIDE SLEEVE POSITION
Check tolerance	†	
cm3/1000s. :	+ 4.0	Rated speed rpm : 1370
Spreed	+	Rack travel in mm : 10,85
Tolerance	+	Tolerance mm : + 1.30
cm3/1000 strokes :	4.0	
Check tolerance	+	FULL LOAD DELIVERY AT FULL LOAD STOP
cm3/1000s. :	7.5	
	+	Rated speed rpm : 1000
Rated speed rpm :	325	Aneroid pressure
	1	hPa : 1500
Rack travel in mm :	5.00	Del. quantity
Tolerance mm :		cm3/1000 strokes : 144.0
Del. quantity	1	Tolerance
cm3/1000 strokes :	26.0	cm3/1000 strokes : +- 1.0
Tolerance		Check tolerance
cm3/1000 strokes :	+ 25	cm3/1000s. : +- 4.0
Check tolerance	1	Spreed
	+- 5.0	Tolerance
	7	cm3/1000 strokes : 4.0
Spreed	Ť	Check tolerance
Tolerance	12.0	
cm3/1000 strokes :	12.0	cm3/1000s. : 7.5
Check tolerance	15.0	
cm3/1000s. :	15.0	
	ţ	
		CONTROL LEVER
(B) SETTING OF INJE	CTION PUMP +	
WITH GOVERNOR	+	control lever
	+	position degree : 123.0
		tolerance degree : +- 4.0
GUIDE SLEEVE TRAVEL	+	
	+	RATED SPEED
Rated speed rpm :	325	
guide sleeve	+	rack travel mm : 10.85
travel mm :	1.25	Rated speed rpm : 1285
Tolerance mm :	+- 0.20 +	Tolerance 1/min : +- 5
· · · · · · · · · · · · · · · · · · ·	+	
Rated speed rpm :	1298	rack travel mm : 4.00
guide sleeve	1	Rated speed rpm : 1360
travel mm :	10.25	Tolerance 1/min : +- 15
Tolerance mm :	+ 0.15	· · · · · · · · · · · · · · · · · · ·
· · · · · · · · · · · · · · · · · · ·	1	rack travel mm : 0.50
Rated speed rpm :	863	Tolerance mm : + 0.50
guide sleeve	1	Rated speed rpm : 1500
travel mm :	5.41	
Tolerance mm :	+ 0.25	
TOTAL ALTO HALL	I	
Pated speed nom :	520	LOW IDLE
Rated speed rpm :	T	LOW INCL
guide sleeve	3.02	
travel mm :		control leven
Tolerance mm :	+ 0.25	control lever
O.A.d	1510	position degree : 76.0
Rated speed rpm :	1510 +	tolerance degree : +- 4.0
107		
11.7		

Testing:

Rated speed rpm : 325 rack travel mm : 4.50 Tolerance mm : + 0.10

Rated speed rpm : 225

CRT mm min. : > 6.00

Rated speed rpm : 375

TORQUE CONTROL

Rated speed rpm : 1000 rack travel mm : 11.85 Tolerance mm : + 0.05

Rated speed rpm : 700 rack travel mm : 11.85 Tolerance mm : +- 0.10

Rated speed rpm : 1250 rack travel mm : 11.85 Tolerance mm : + 0.10

ANEROID/ALTITUDE COMPENSATOR TEST

SETTING

Rated speed rpm : 600
Pressure hPa : 1500
rack travel mm : 11.85
Tolerance mm : +- 0.05

MEASUREMENT

Pressure hPa : Rated speed rpm : 600
rack travel mm : 7.00
Tolerance mm : + 0.20

Rated speed rpm : 600

Pressure hPa : 370
rack travel mm : 10.75
Tolerance mm : + 0.05

Pressure hPa : 200 rack travel mm : 8.40 Tolerance mm : + 0.10

FUEL DELIVERY CHARACTERISTICS

Aneroid pressure

hPa : 1500 Rated speed rpm : 700

Del. quantity

cm3/1000 strokes : 145.0

Tolerance

cm3/1000 strokes : +- 3.0 Check tolerance

6.0

cm3/1000s. : +-

Aneroid pressure

hPa : Rated speed rpm : 600
Del. quantity

cm3/1000 strokes : 98.5

Tolerance

cm3/1000 strokes : \leftarrow 1.0

Check tolerance cm3/1000s. : +- 3.5

BREAKAWAY

Rack travel in mm : 10.85 Rated speed rpm : 1285 Tolerance 1/min : +- 5

LOW IDLE

325 Rated speed rpm 5.00 rack travel mm Tolerance mm 0.20 Del. quantity cm3/1000 strokes 26.0 Tolerance 2.5 cm3/1000 strokes Check tolerance cm3/1000s. : +--5.0 Spreed Tolerance 12.0 cm3/1000 strokes Check tolerance cm3/1000s. 15.0

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

Edition : 11.03.96 Test oil : ISO 4113

Combination No. : 0 402 046 876

Injection pump

Pump designation : PES6P110A320RS3329Y EP type number : 0 412 016 756

Governor

Governer design. : RQV325...1250PA1251 Governer no. : 0 421 814 164

Cust. part No. : 1309375/0

Customer-spec. information Customer : DAF Motor : NS133M Power KW : 133.0

TEST BENCH REQUIREMENTS

Inlet line : 3.2

Test oil inlet

temp. °C : 40
Tolerance °C : + 2.0

Overflow valve : 1 417 413 000

Inlet press. bar : 1.5
Tolerance bar : +- 0.1

Overflow quantity

min. l/h : 160 Tolerance l/h : + 20.0

Test nozzle holde

assembly : 1 688 901 101

Opening pressure

bar : 208.5 Tolerance bar : +- 1.5 Test lines : 1 680 750 008

Outside diameter : 6.0

x inside diameter: 2.0 x length mm : 600

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant.

per values ____

BEGINNING OF DELIVERY

Test pressure bar : 26.0 Tolerance bar : + 1.0

Prestroke mm : 4.85
Tolerance mm : + 0.05
Check

tolerance mm : +- 0.10

Rack travel in mm : 20.50
Tolerance mm : + 0.50

Firing order : 1-5-3-6-2-

: 4

Phasing : 0-60-120-180-240

: -300

Tolerance : + 0.30

Check

tolerance "NW : + 0.50

Start of delivery mark

Tolerance : + 0.10

Check

tolerance $^{\circ}NW$: + 0.75

Barrel no. : 1

BASIC SETTING

Rated speed rpm : 1000

Rack travel in mm : 11.85
Tolerance mm : +- 0.05

Del. quantity cm3/1000 strokes : 146.0	+ guide sleeve + travel mm : 13.50 + Tolerance mm : + 0.50
cm3/1000 strokes : + 1.0	GUIDE SLEEVE POSITION
Check tolerance cm3/1000s. : +- 4.0	Rated speed rpm : 1370
Spreed Tolerance cm3/1000 strokes : 4.0	Rack travel in mm : 10.85 Tolerance mm : +- 1.30
Check tolerance cm3/1000s. : 7.5	FULL LOAD DELIVERY AT FULL LOAD STOP
Rated speed rpm : 325	+ Rated speed rpm : 1000 + Aneroid pressure + hPa : 1500
Rack travel in mm: 5.00 Tolerance mm: + 0.20 Del. quantity	Del. quantity cm3/1000 strokes : 146.0 Tolerance
cm3/1000 strokes : 26.0 Tolerance	cm3/1000 strokes : + 1.0 Check tolerance
cm3/1000 strokes : + 2.5 Check tolerance - cm3/1000s. : + 5.0	+ cm3/1000s. : +- 4.0 - Spreed - Tolerance
cm3/1000s. : + 5.0 - Spreed - Tolerance	tolerance cm3/1000 strokes : 4.0 Check tolerance
cm3/1000 strokes : 12.0 - Check tolerance	cm3/1000s. : 7.5
cm3/1000s. : 15.0	
(B) SETTING OF INJECTION PUMP WITH GOVERNOR	control Lever position degree : 123.0
GUIDE SLEEVE TRAVEL	tolerance degree : +- 4.0 RATED SPEED
Rated speed rpm : 325 - guide sleeve	rack travel mm : 10.85
travel mm : 1.25 - Tolerance mm : + 0.20 -	Rated speed rpm : 1285 Tolerance 1/min : +- 5
Rated speed rpm : 1298 - guide sleeve -	rack travel mm : 4.00 Rated speed rpm : 1360
travel mm : 10.25 - Tolerance mm : + 0.15 -	Tolerance 1/min : +- 15
Rated speed rpm : 863	rack travel mm : 0.50 Tolerance mm : + 0.50 Rated speed rpm : 1500
travel mm : 5.41 Tolerance mm : + 0.25	Rated Speed Ipili . 1300
Rated speed rpm : 520 - guide sleeve	LOW IDLE
travel mm : 3.02 - Tolerance mm : + 0.25 -	control lever
Rated speed rpm : 1510	- position degree : 76.0 - tolerance degree : +- 4.0

Testing:

Rated speed rpm : 325
rack travel mm : 4.50
Tolerance mm : + 0.10

Rated speed rpm : 225

CRT mm min. :> 6.00

Rated speed rpm : 375

TORQUE CONTROL

Rated speed rpm : 1000 rack travel mm : 11.85 Tolerance mm : + 0.05

Rated speed rpm : 700 rack travel mm : 11.85 Tolerance mm : +- 0.10

Rated speed rpm : 1250 rack travel mm : 11.85 Tolerance mm : + 0.10

ANEROID/ALTITUDE COMPENSATOR TEST

SETTING

Rated speed rpm : 600
Pressure hPa : 1500
rack travel mm : 11.85
Tolerance mm : + 0.05

MEASUREMENT

Pressure hPa : Rated speed rpm : 600
rack travel mm : 6.40
Tolerance mm : +- 0.20

Rated speed rpm : 600

Pressure hPa : 310
rack travel mm : 10.55
Tolerance mm : + 0.05

Pressure hPa : 130 rack travel mm : 7.85 Tolerance mm : +- 0.10

FUEL DELIVERY CHARACTERISTICS

Aneroid pressure

hPa : 1500 Rated speed rpm : 700

Del. quantity

cm3/1000 strokes : 147.5

Tolerance

cm3/1000 strokes : +- 3.0 Check tolerance

cm3/1000s. : +- 6.0

Aneroid pressure

hPa : - 600

Del. quantity cm3/1000 strokes : 88.0 Tolerance

cm3/1000 strokes : +- 1.0

Check tolerance cm3/1000s. : +- 3.5

BREAKAWAY

Rack travel in mm: 10.85
Rated speed rpm: 1285
Tolerance 1/min: +- 5

LOW IDLE

Rated speed rpm 325 5.00 rack travel mm Tolerance mm 0.20 Del. quantity cm3/1000 strokes : 26.0 Tolerance cm3/1000 strokes : +-2.5 Check tolerance cm3/1000s. : +-5.0 Spreed Tolerance 12.0 cm3/1000 strokes : Check tolerance cm3/1000s. 15.0

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

: 12.03.96 Edition : ISO 4113 Test oil

Combination No. : 0 402 646 742

Injection pump

Pump designation : PE6P12OA32OLS7837-2

EP type number : 0 412 626 943

Governor

Governer design. : RQ300/1100PA1272 : 0 421 801 804 Governer no.

Cust. part No. : 0270743002

Customer-spec. information Customer : MB-NFZ : OM441 LA Motor Power KW : 228.0

TEST BENCH REQUIREMENTS

: 3.1 Inlet line

Test oil inlet

temp. °C 40 Tolerance °C 2.0

Overflow valve : 1 417 413 047

Inlet press. bar : Tolerance bar : +- 0.1

Overflow quantity

: 120 min. L/h Tolerance L/h : + 20.0

Test nozzle holde

: 1 688 901 019 assembly

Opening pressure

208.5 bar Tolerance bar : +- 1.5 Test lines : 1 680 750 075

Outside diameter : 8.0

x inside diameter : x length mm : 1000

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant.

per values _____

BEGINNING OF DELIVERY

Test pressure bar : 26.0 Tolerance bar : + 1.0

Prestroke mm 5.25 : +- 0.05 Tolerance mm Check

: + 0.10tolerance mm

Rack travel in mm: 20.50 Tolerance mm : + 0.50

: 6-3-5-2-4-Firing order

: 1

Phasing : 0-60-120-180-240

: -300 : +- 0.30

Tolerance Check

tolerance *NW : +- 0.50

Start of delivery mark

Tolerance : + - 0.10

Check

tolerance *NW : +- 0.75

6 Barrel no.

BASIC SETTING

Rated speed rpm : 600

12,60 Rack travel in mm :

Rack travel in mm : 12,60

Tolerance mm : + 0.05 - Tolerance mm : + 0.05	Tolerance mm : +- 0.10
Del. quantity	Rated speed rpm : 570 guide sleeve
cm3/1000 strokes : 193.5	travel mm : 6.00
(IIID) 1000 3610KES 1 175.5	Tolerance mm : +- 0.10
Y-1	Toterance mm : Total
Tolerance -	†
cm3/1000 strokes : + 1.0	+ Rated speed rpm : 1350
•	🕂 guide sleeve
Check tolerance -	+ travel mm : 11.50
cm3/1000s. : +- 4.0	Tolerance mm : + 0.50
CIBY (0003. : ** 4.0 **	Toterance inin : + 0.50
	†
Spreed -	
Tolerance -	GUIDE SLEEVE POSITION
cm3/1000 strokes : 6.0	
CIRT TODO SELONES . O.O	Dotted annual name 4 450
	Rated speed rpm : 650
Check tolerance -	†
cm3/1000s. : 9.0 -	+ Rack travel in mm : 20.00
•	Tolerance mm : + 0.80
Rated speed rpm : 300	
varea speed this . Soo	
Rack travel in mm: 6.00 -	FULL LOAD DELIVERY AT FULL LOAD STOP
Tolerance mm : +- 0.30	+
Del. quantity -	Rated speed rpm : 600
cm3/1000 strokes : 19.0	Aneroid pressure
	1 1 - 1 - 1
Tolerance	
cm3/1000 strokes : +- 3.0	Del. quantity
Check tolerance	cm3/1000 strokes : 193.5
cm3/1000s. : +- 6.0	† Tolerance
Spreed -	cm3/1000 strokes : +- 1.0
Tolerance	Check tolerance
cm3/1000 strokes : 6.0 -	cm3/1000s. : +- 4.0
Check tolerance -	Spreed
cm3/1000s. : 10.0	- Tolerance
-	cm3/1000 strokes : 6.0
	Check tolerance
(B) SETTING OF INJECTION PUMP	cm3/1000s. : 9.0
WITH GOVERNOR	•
•	
GUIDE SLEEVE TRAVEL	- CONTROL LEVER
Rated speed rpm : 300	control lever
guide sleeve	position degree : 94.0
travel mm : 1.94	tolerance degree : +- 4.0
Tolerance mm : + 0.20	
	RATED SPEED
Rated speed rpm : 1153	
guide sleeve	rack travel mm : 12.80
travel mm : 6.37	Rated speed rpm : 1140
Tolerance mm : + 0.15	Tolerance 1/min : +- 8
†	
Rated speed rpm : 1100	rack travel mm : 4.00
guide sleeve	Rated speed rpm : 1250
travel mm : 6.00	- Tolerance 1/min : +- 15
Tolerance mm : \leftarrow 0.10	made demonstration of the
†	rack travel mm : 0.75
Rated speed rpm : 431	- Tolerance mm : +- 0.75
guide sleeve	- Rated speed rpm : 1350
travel mm : 4.71	•
PIMEN TOTAL	

: > Rated speed rpm LOW IDLE Rated speed rpm : < Check control lever speed 1/min : > 72.0 Check position degree speed 1/min tolerance degree : +-: < Testing: FUEL DELIVERY CHARACTERISTICS 300 Rated speed rpm rack travel mm 5.60 Aneroid pressure 0.10 1500 Tolerance mm 1100 Rated speed rpm 2.00 rack travel mm Del. quantity cm3/1000 strokes : Rated speed rpm 400 Tolerance 1/min 20 Tolerance cm3/1000 strokes Rated speed rpm 200 Check tolerance cm3/1000s. CRT mm min. 9.00 Spreed Tolerance cm3/1000 strokes TORQUE CONTROL Check tolerance cm3/1000s. 600 Rated speed rpm 12.60 Aneroid pressure rack travel mm 1500 : ← 0.05 Tolerance mm hPa Rated speed rpm 1100 Del. quantity Rated speed rpm 13.70 cm3/1000 strokes : rack travel mm : +- 0.10 Tolerance Tolerance mm cm3/1000 strokes 700 Check tolerance Rated speed rpm 13.70 cm3/1000s. rack travel mm : +-: + - 0.10Tolerance mm Aneroid pressure ANEROID/ALTITUDE Rated speed rpm Del. quantity COMPENSATOR TEST cm3/1000 strokes : Tolerance cm3/1000 strokes Check tolerance MEASUREMENT cm3/1000s. 200 Pressure hPa -2.00rack travel mm : +- 0.05 BREAKAWAY Tolerance mm 350 Pressure hPa -0.80Rack travel in mm : rack travel mm Tolerance mm : **←** 0.15 Rated speed rpm 1140 Tolerance 1/min 850 Pressure hPa 0.50 rack travel mm : : +- 0.05 Tolerance mm STARTING FUEL DELIVERY START CUT-OUT Rated speed rpm

100

220

80

240

219.0

1.5

4.5

8.0

12.0

700

214.0

3.0

6.0

500

151.0

1.0

4.0

12.80

100

Del. quantity cm3/1000 strokes : 240.0 Tolerance cm3/1000 strokes : + 10.0 Check tolerance cm3/1000s. : + 14.0

LOW IDLE

Rated speed rpm 300 6.00 rack travel mm Tolerance mm : +- 0.30 Del. quantity 19.0 cm3/1000 strokes : Tolerance cm3/1000 strokes : +-3.0 Check tolerance cm3/1000s. 6.0 Spreed Tolerance cm3/1000 strokes : 6.0 Check tolerance cm3/1000s. 10.0

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

Edition : 05.03.96 Test oil : ISO 4113

Combination No. : 0 402 678 822

Injection pump

Pump designation : PE8P12DA32DLS7840-2 EP type number : 0 412 628 873

Governor

Governer design. : RSV350...1050P0A535

: -10

Governer no. : 0 421 833 395

Cust. part No. : 0220743002

Customer-spec. information
Customer : MB-NFZ
Motor : OM 442 A
Power KW : 250.0

TEST BENCH REQUIREMENTS

Inlet line : 3.1

Test oil inlet

temp. °C : 40
Tolerance °C : +- 2.0

Overflow valve : 1 417 413 025

Inlet press. bar : 1.5

Overflow quantity

min. l/h : 110 Tolerance l/h : + 10.0

Test nozzle holde

assembly : 1 688 901 105

Opening pressure

bar : 208.5 Tolerance bar : + 1.5 Test lines : 1 680 750 075

Outside diameter : 8.0

x inside diameter: 2.5

x length mm : 1000

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant.

per values _____

BEGINNING OF DELIVERY

Test pressure bar : 26.0 Tolerance bar : +- 1.0

Prestroke mm : 5.25
Tolerance mm : + 0.05

Check

tolerance mm : + 0.10

Rack travel in mm : 20.50 Tolerance mm : + 0.50

Firing order : 8-7-2-6-3

: - 5- 4- 1

Phasing : 0-45-90-135-180 : -225-270-315

Tolerance : + 0.30

Check

tolerance *NW : +- 0.50

Start of delivery mark

Barrel no. : 8

BASIC SETTING

Rated speed rpm : 1030

Rack travel in mm : 12.65
Tolerance mm : + 0.05

Del. quantity

cm3/1000 strokes : 194.0

Tolerance cm3/1000 strokes : +- 1.0	
Check tolerance	CONTROL LEVER
cm3/1000s. : +- 4.0	r - control lever - position degree : 99.0
Spreed	tolerance degree : +- 4.0
Tolerance cm3/1000 strokes : 6.0	- - -
Check tolerance cm3/1000S. : 9.0 -	LOW IDLE
Rated speed rpm : 350	
Rack travel in mm: 5.40	- control lever - position degree : 76.0
Tolerance mm : +- 0.30 Del. quantity	tolerance degree : + 4.0
cm3/1000 strokes : 13.0 -	Testing:
cm3/1000 strokes : +- 3.0	Rated speed rpm : 350
Check tolerance cm3/1000s. : + 6.0	rack travel mm : 5.40 Tolerance mm : + 0.10
Spreed	- Toterance man : - U.TU
Tolerance	rack travel mm : 2.00
cm3/1000 strokes : 8.0	Rated speed rpm : 415
Check tolerance cm3/1000s. : 12.0	Tolerance 1/min : +- 30
. 1210	- Rated speed rpm : 100
(B) SETTING OF INJECTION PUMP WITH GOVERNOR	CRT mm min. : > 19.50
10.11.	SET IDLE AUXILIARY SPRING
	- Rated speed rpm : 100
GUIDE SLEEVE POSITION	- rack travel mm : 2.00 -
Rated speed rpm : 800	TORQUE CONTROL
Rack travel in mm: 0.50	-
Tolerance mm : +- 0.20	- Rated speed rpm : 1030 - rack travel mm : 12.65
	- Tolerance mm : + 0.05
FULL LOAD DELIVERY AT FULL LOAD STOP	- 700
Rated speed rpm : 1030	- Rated speed rpm : 700 - rack travel mm : 13.20
Aneroid pressure	Tolerance mm : +- 0.10
hPa : 1200	
Del. quantity + cm3/1000 strokes : 194.0 +	- Rated speed rpm : 900 - rack travel mm : 12.90
cm3/1000 strokes : 194.0	Tolerance mm : + Q.10
cm3/1000 strokes : + 1.0	•
Check tolerance + 4.0 +	- ANEROID/ALTITUDE
Spreed +	- COMPENSATOR TEST
Tolerance	•
cm3/1000 strokes : 6.0	
Check tolerance +	
cm3/1000s. : 9.0	. MEASUREMENT

Rated speed rpm	500
Pressure hPa	: 350
rack travel mm	: 0.45
Tolerance mm	: + 0.05
Pressure hPa	: 700
rack travel mm	: 1.70
Tolerance mm	: + 0.10

Drangung hon

FUEL DELIVERY CHARACTERISTICS

Aneroid pressure			
hPa	:	•	1200
Rated speed rpm	:		700
Del. quantity			
cm3/1000 strokes	:		210.0
Tolerance			
cm3/1000 strokes	:	+-	2.0
Check tolerance			
cm3/1000s.		+-	5.0
Spreed			
Tolerance			
cm3/1000 strokes	:		8.0
-t t t t			

cm3/1000 strokes : 8.0 Check tolerance cm3/1000s. : 12.0

Aneroid pressure
hPa : Rated speed rpm : 500
Del. quantity
cm3/1000 strokes : 137.0
Tolerance
cm3/1000 strokes : + 1.0
Check tolerance
cm3/1000s. : + 4.0
Spreed
Tolerance
cm3/1000 strokes : 8.0

Check tolerance cm3/1000s. : 12.0

STARTING FUEL DELIVERY

Rated speed rpm : 100
Del. quantity
cm3/1000 strokes : 210.0
Tolerance
cm3/1000 strokes : +- 10.0
Check tolerance
cm3/1000s. : +- 14.0

LOW IDLE

Rated speed rpm	: 350
rack travel mm	: 5.40
Tolerance mm	: ← 0.30
Del. quantity	
cm3/1000 strokes	: 13.0
Tolerance	
cm3/1000 strokes	: +- 3.0
Check tolerance	
cm3/1000s.	: +- 6.0
Spreed	
Tolerance	
cm3/1000 strokes	: 8.0
Check tolerance	
cm3/1000s.	: 12.0
	. ,2.0

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

Edition : 07,02,96 Test oil : ISO 4113

Combination No. : 0 402 946 014

Injection pump

Pump designation : PES6P120A720LS8037 EP type number : 0 412 926 024

Governor

Governer design. : RQV250...1050PA1236K

Governer no. : 0 421 815 970

Cust. part No. : 1370101

Customer-spec. information Customer : SCANIA : DSC1202 Motor

TEST BENCH REQUIREMENTS

Inlet line : EHAB

Test oil inlet

temp. °C : +- 2.0 Tolerance °C

Overflow valve : 2 417 413 082

Inlet press. bar : 2.5
Tolerance bar : + 0.1

Overflow quantity

min. l/h : 85 Tolerance l/h : + 10.0

Test nozzle holde

: 1 688 901 104 assembly

Opening pressure

bar : 251.5 Tolerance bar : + 1.5

Test lines : 1 680 750 008

Outside diameter : 6.0

x inside diameter :

x Length mm : 600

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant.

per values _____

BEGINNING OF DELIVERY

Test pressure bar : 26.0 Tolerance bar : + 1.0

Prestroke mm : 4.40 Tolerance mm : +- 0.05

Check

tolerance mm : + 0.10

Rack travel in mm: 10.00 Tolerance mm : + 1.50

Firing order : 1-5-3-6-2-: 4

Phasing : 0-60-120-180-240

: -300

Tolerance : +- 0.30

Check

tolerance °NW : + 0.50

Start of delivery blocking

*NW after s.o.d. : 180.00 Tolerance : +- 0.50

Check

tolerance °NW : + 0.75

Barrel no. : 1

BASIC SETTING

Rated speed rpm : 775

Rack travel in mm: 14.05

Tolerance mm : + 0.05	Rated speed rpm : 1310
Del. quantity cm3/1000 strokes : 330.0	guide sleeve travel mm : 13.50 Tolerance mm : + 0.50
Tolerance cm3/1000 strokes : + 1.0	GUIDE SLEEVE POSITION
Check tolerance cm3/1000s. : + 10.0	Rated speed rpm : 1170
Spreed Tolerance cm3/1000 strokes : 8.0	Rack travel in mm : 12.10 Tolerance mm : +- 1.30
Check tolerance cm3/1000s. : 14.0	FULL LOAD DELIVERY AT FULL LOAD STOP
Rated speed rpm : 250	Rated speed rpm : 775 Aneroid pressure hPa : 1500
Rack travel in mm: 4.60 Tolerance mm: + 0.30 Del. quantity	Del. quantity cm3/1000 strokes : 330.0 Tolerance
cm3/1000 strokes : 19.0 +	cm3/1000 strokes : +- 1.0 Check tolerance
cm3/1000 strokes : + 3.0 + Check tolerance cm3/1000s. : + 6.0 +	cm3/1000s. : +- 10.0 Spreed Tolerance
Spreed +	cm3/1000 strokes : 8.0 Check tolerance
cm3/1000 strokes : 4.0 + Check tolerance cm3/1000s. : 8.0 +	cm3/1000s. : 14.0
(B) SETTING OF INJECTION PUMP WITH GOVERNOR	CONTROL LEVER control lever position degree : 63.0
GUIDE SLEEVE TRAVEL	tolerance degree : + 4.0 control lever
Rated speed rpm : 250 guide sleeve travel mm : 1.79 Tolerance mm : + 0.20	position degree : 121.0 tolerance degree : +- 4.0
Rated speed rpm : 1116 guide sleeve travel mm : 10.09	rack travel mm : 12.10 Rated speed rpm : 1095 Tolerance 1/min : +- 5
Tolerance mm : + 0.15 Rated speed rpm : 644 guide sleeve	rack travel mm : 4.00 Rated speed rpm : 1180 Tolerance 1/min : +- 15
travel mm : 4.47 Tolerance mm : + 0.25	rack travel mm : 0.50 Tolerance mm : +- 0.50
Rated speed rpm : 290 guide sleeve	Rated speed rpm : 1300
travel mm : 2.62 Tolerance mm : +- 0.25	

		† Tolerance mm : +- 0.20
LOW IDLE		Rated speed rpm : 775
control lever position degree tolerance degree control lever position degree tolerance degree	: + 4.0 : 17.0	Pressure hPa : 300 rack travel mm : 9.80 Tolerance mm : + 0.15 Pressure hPa : 610 rack travel mm : 11.50 Tolerance mm : + 0.05
Testing:		START CUT-OUT
Rated speed rpm rack travel mm Tolerance mm	: 250 : 4.60 : + 0.30	Rated speed rpm : > 100 Rated speed rpm : < 170 Check
Rated speed rpm	: 150	speed 1/min :> 80 Check
CRT mm min.	: > 7.30	speed 1/min : < 190
Rated speed rpm	: 275	FUEL DELIVERY CHARACTERISTICS
TORQUE CONTROL Rated speed rpm rack travel mm Tolerance mm Rated speed rpm rack travel mm Tolerance mm Rated speed rpm rack travel mm Tolerance mm Rated speed rpm Tolerance mm ANEROID/ALTITUDE COMPENSATOR TEST	: 14.05 : + 0.05 : 650 : 13.05 : + 0.10 : 1050 : 13.10 : + 0.10	Aneroid pressure hPa : 1500 Rated speed rpm : 650 Del. quantity cm3/1000 strokes : 319.0 Tolerance cm3/1000 strokes : + 4.0 Check tolerance cm3/1000s. : + 10.0 Aneroid pressure hPa : 1500 Rated speed rpm : 1050 Del. quantity cm3/1000 strokes : 272.0 Tolerance cm3/1000 strokes : + 4.0 Check tolerance cm3/1000s. : + 8.0 Aneroid pressure
SETTING Rated speed rpm Pressure hPa rack travel mm Tolerance mm MEASUREMENT Pressure hPa Rated speed rpm rack travel mm	: 14.05 : +- 0.10 : - : 775	hPa : 1500 Rated speed rpm : 675 Tolerance cm3/1000 strokes : + 4.0 Check tolerance cm3/1000s. : + 10.0 Aneroid pressure hPa : - Rated speed rpm : 950 Del. quantity cm3/1000 strokes : 2.0

Tolerance cm3/1000 strokes : +-2.0 Aneroid pressure 500 Rated speed rpm Del. quantity cm3/1000 strokes : 192.0 Tolerance cm3/1000 strokes : +-1.0 Check tolerance cm3/1000s. 4.0 BREAKAWAY Rack travel in mm: 12,10 Rated speed rpm : 1095 Toterance 1/min STARTING FUEL DELIVERY Rated speed rpm 100 rack travel mm 10.70 Tolerance mm : +- 0.50 Del. quantity cm3/1000 strokes : 210.0 Tolerance cm3/1000 strokes : +- 20.0Check tolerance cm3/1000s. : +- 24.0 LOW IDLE 250 Rated speed rpm 4.60 rack travel mm 0.30 Tolerance mm Del. quantity cm3/1000 strokes : 19.0 Tolerance cm3/1000 strokes : +-3.0 Check tolerance cm3/1000s. 6.0 : +-Spreed Tolerance cm3/1000 strokes : 4.0 Check tolerance cm3/1000s. 8.0

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

Edition Test oil : 08.02.96 : ISO 4113

Combination No. : 0 402 946 018

Injection pump

Pump designation : PES6P120A720RS8041

EP type number : 0 412 926 027

Governor

Governer design. : RQV250...950PA1253

Governer no. : D 421 814 166

Cust. part No. : 1383215

Customer-spec. information Customer : SCANIA

: DSC 11.75 Motor

TEST BENCH REQUIREMENTS

Inlet line : EHAB

Test oil inlet

temp. °C Tolerance °C 2.0

Overflow valve : 2 417 413 082

Inlet press. bar : 2.5 Inlet press. bar : 2.5 Tolerance bar : + 0.1

Overflow quantity

min. L/h : 110 Tolerance L/h : +- 10.0

Test nozzle holde

: 1 688 901 104 assembly

Opening pressure

: 251.5 bar

Tolerance bar : + 1.5

Test Lines : 1 680 750 008

Outside diameter : 6.0

x inside diameter: 2.0

x length mm : 600

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant.

per values _____

BEGINNING OF DELIVERY

Test pressure bar : 26.0 Tolerance bar : + 1.0

: 4.40 Prestroke mm

: +- 0.05 Tolerance mm

Check

: +- 0.10 tolerance mm

Rack travel in mm : 20.50 Tolerance mm : + 0.50

: 1-5-3-6-2-Firing order

Phasing : 0-60-120-180-240

: -300

Tolerance : + 0.30

Check

tolerance *NW : +- 0.50

Start of delivery blocking

Tolerance : + 0.50

Check

tolerance "NW : +- 0.75

Barrel no. : 1

BASIC SETTING

Rated speed rpm : 700

Rack travel in mm: 11.20

Tolerance mm : +- 0.05

Del. quantity cm3/1000 strokes : 261.0 Tolerance	guide sleeve travel mm : 11.50 Tolerance mm : + 0.50
cm3/1000 strokes : +- 1.0	GUIDE SLEEVE POSITION
Check tolerance cm3/1000s. : +- 8.0	Rated speed rpm : 1235
Spreed Tolerance cm3/1000 strokes : 8.0	Rack travel in mm : 10.20 Tolerance mm : + 1.30
Check tolerance cm3/1000s. : 14.0	FULL LOAD DELIVERY AT FULL LOAD STOP
Rated speed rpm : 250	Rated speed rpm : 700 Aneroid pressure hPa : 1500
Rated speed rpm : 250 Rack travel in mm : 5.60 Tolerance mm : + 0.30 Del. quantity cm3/1000 strokes : 16.0 Tolerance cm3/1000 strokes : + 3.0 Check tolerance cm3/1000s. : + 6.0 Spreed Tolerance cm3/1000 strokes : 4.0 Check tolerance cm3/1000 strokes : 4.0 Check tolerance cm3/1000s. : 8.0	Del. quantity cm3/1000 strokes : 261.0 Tolerance
cm3/1000 strokes : 16.0 Tolerance cm3/1000 strokes : + 3.0 Check tolerance	<pre>cm3/1000 strokes : +- 1.0 Check tolerance cm3/1000s. : +- 8.0 Spreed</pre>
cm3/1000s. : + 6.0 Spreed Tolerance	Tolerance cm3/1000 strokes : 8.0 Check tolerance
cm3/1000 strokes : 4.0 Check tolerance	cm3/1000s. : 14.0
cm3/1000s. : 8.0	
(B) SETTING OF INJECTION PUMP WITH GOVERNOR	control lever position degree : 59.0
GUIDE SLEEVE TRAVEL	tolerance degree : +- 4.0 control lever
Rated speed rpm : 250 guide sleeve travel mm : 1.31	position degree : 112.0 tolerance degree : +- 4.0
Tolerance mm : + 0.20	RATED SPEED
Rated speed rpm : 1006 guide sleeve travel mm : 7.25 Tolerance mm : + 0.15	rack travel mm : 10.20 Rated speed rpm : 995 Tolerance 1/min : +- 5
Rated speed rpm : 673 - guide sleeve	rack travel mm : 4.00 Rated speed rpm : 1130 Tolerance 1/min : +- 15
travel mm : 4.96 Tolerance mm : + 0.25	rack travel mm : 0.50 Tolerance mm : + 0.50
Rated speed rpm : 420 guide sleeve	Rated speed rpm : 1250
travel mm : 3.37 Tolerance mm : +- 0.25	LOUTING
Rated speed rpm : 1390	LOW IDLE

		+	
control lever position degree tolerance degree	: 66.0 : +- 4.0	†	START CUT-OUT
control lever		+	Rated speed rpm : > 100 Rated speed rpm : < 170
tolerance degree		‡	Check speed 1/min : > 80
Testing:	252	Ŧ	Check speed 1/min : < 190
Rated speed rpm rack travel mm Tolerance mm	: 250 : 5.60 : + 0.10	† †	FUEL DELIVERY CHARACTERISTICS
Rated speed rpm	: 150	Ŧ	Aneroid pressure
CRT mm min.	: > 7.00	Ţ	hPa : 1500 Rated speed rpm : 950
Rated speed rpm	: 300	1	Del. quantity cm3/1000 strokes : 245.0 Tolerance
TORQUE CONTROL			cm3/1000 strokes : +- 4.0 Check tolerance cm3/1000s. : +- 7.0
Rated speed rpm rack travel mm Tolerance mm	: 11.20	+	Aneroid pressure hPa : -
Rated speed rpm rack travel mm Tolerance mm	: 11.20	‡	Rated speed rpm : 500 Del. quantity cm3/1000 strokes : 153.0 Tolerance
	0.05		cm3/1000 strokes : +- 1.0 Check tolerance
ANEROID/ALTITUDE COMPENSATOR TEST		+	cm3/1000s. : +- 4.0
SETTING		7	BREAKAWAY
Rated speed rpm Pressure hPa rack travel mm Tolerance mm	: 1500 : 11.20	+	Rack travel in mm : 10.20 Rated speed rpm : 995 Tolerance 1/min : +- 5
MEASUREMENT		+	STARTING FUEL DELIVERY
Pressure hPa Rated speed rpm rack travel mm Tolerance mm		. ‡	Rated speed rpm : 100 rack travel mm : 20.50 Tolerance mm : +- 0.50 Del. quantity
Rated speed rpm	: 500	<u>I</u>	cm3/1000 strokes : 170.0 Tolerance
Pressure hPa rack travel mm Tolerance mm	: 290 : 9.00 : + 0.15	Ŧ	cm3/1000 strokes : +- 20.0 Check tolerance cm3/1000s. : +- 24.0
Pressure hPa rack travel mm Tolerance mm	: 540 : 10.40 : +- 0.05	†	

LOW IDLE

Rated speed rpm	:	250	
rack travel mm	:	5.60	
Tolerance mm	; +	0.30	
Del. quantity			
cm3/1000 strokes	:	16.0	
Tolerance			
cm3/1000 strokes	: +	3.0	
Check tolerance			
cm3/1000\$.	: +-	6.0	
Spreed			
Tolerance			
cm3/1000 strokes	:	4.0	
Check tolerance			
cm3/1000s.	:	8.0	

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

: 08.02.96 Edition Test oil : ISO 4113

Combination No. : 0 402 946 019

Injection pump

Pump designation : PES6P120A720RS8041 EP type number : 0 412 926 027

Governor

Governer design. : RQV250...950PA1253

: -1

: 0 421 814 167 Governer no.

Cust. part No. : 1383216

Customer-spec. information Customer : SCANIA : DSC 11.74 Motor

TEST BENCH REQUIREMENTS

Inlet line : EHAB

Test oil inlet

temp. °C 40 Tolerance °C : +- 2.0

Overflow valve : 2 417 413 082

Inlet press. bar : Tolerance bar : + 0.1

Overflow quantity

min. L/h : 110 Tolerance L/h : + 10.0

Test nozzle holde

: 1 688 901 104 assembly

Opening pressure

: 251.5 bar Tolerance bar : +- 1.5 Test lines : 1 680 750 008

Outside diameter : 6.0

x inside diameter: 2.0

x length mm : 600

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant.

per values ____

BEGINNING OF DELIVERY

Test pressure bar : 26.0 Tolerance bar : + 1.0

Prestroke mm Tolerance mm : 4,40 : +- 0.05 Check

tolerance mm : + 0.10

Rack travel in mm: 20.50 Tolerance mm : +- 0.50

Firing order : 1-5-3-6-2-

: 4

Phasing : 0-60-120-180-240

: -300 Tolerance : +- 0.30

Check

tolerance "NW : +- 0.50

Start of delivery blocking

: + 0.50Tolerance

Check

tolerance °NW : + 0.75

: 1 Barrel no.

BASIC SETTING

Rated speed rpm : 700

Rack travel in mm: 10.35 Tolerance mm : +- 0.05

Pel. quantity +	guide sleeve
cm3/1000 strokes : 227.0 +	travel mm : 11.50
	Tolerance mm : + 0.50
Tolerance	
cm3/1000 strokes : + 1.0 +	OUTD OF STREET CONTESTANT
Charle to Lancasco	GUIDE SLEEVE POSITION
Check tolerance + 7.0 +	Rated speed rpm : 1250
	Rated speed rpm : 1250
Spreed	Rack travel in mm : 9.35
Tolerance	Tolerance mm : + 1.30
cm3/1000 strokes : 8.0	
+	
Check tolerance +	FULL LOAD DELIVERY AT FULL LOAD STOP
cm3/1000s. : 14.0 +	
†	Rated speed rpm : 700
Rated speed rpm : 250 +	Aneroid pressure
Dool Annual Su and 5 5 (0	hPa : 1500
Rack travel in mm: 5.60 + Tolerance mm: + 0.30 +	Del. quantity cm3/1000 strokes : 227.0
· · · · · · · · · · · · · · · · · · ·	cm3/1000 strokes : 227.0 Tolerance
Del. quantity + cm3/1000 strokes : 16.0 +	cm3/1000 strokes : +- 1.0
Tolerance	Check tolerance
cm3/1000 strokes : + 3.0 +	cm3/1000s. : +- 7.0
Check tolerance	Spreed
cm3/1000s. : +- 6.0	Tolerance
Spreed	cm3/1000 strokes : 8.0
Tolerance +	Check tolerance
cm3/1000 strokes : 4.0	cm3/1000s. : 14.0
Check tolerance +	
cm3/1000s. : 8.0 +	
†	CONTROL LEVED
(B) SETTING OF INJECTION PLIMP	CONTROL LEVER
(B) SETTING OF INJECTION PUMP	
(B) SETTING OF INJECTION PUMP WITH GOVERNOR	control lever
	control lever position degree : 58.0
	control lever position degree : 58.0
GUIDE SLEEVE TRAVEL	control lever position degree : 58.0 tolerance degree : + 4.0 control lever
WITH GOVERNOR GUIDE SLEEVE TRAVEL Rated speed rpm : 250	control lever position degree : 58.0 tolerance degree : + 4.0 control lever position degree : 111.0
WITH GOVERNOR GUIDE SLEEVE TRAVEL Rated speed rpm : 250 guide sleeve	control lever position degree : 58.0 tolerance degree : + 4.0 control lever
WITH GOVERNOR GUIDE SLEEVE TRAVEL Rated speed rpm : 250 guide sleeve travel mm : 1.31	control lever position degree : 58.0 tolerance degree : + 4.0 control lever position degree : 111.0 tolerance degree : + 4.0
WITH GOVERNOR GUIDE SLEEVE TRAVEL Rated speed rpm : 250 guide sleeve	control lever position degree : 58.0 tolerance degree : + 4.0 control lever position degree : 111.0
WITH GOVERNOR GUIDE SLEEVE TRAVEL Rated speed rpm : 250 guide sleeve travel mm : 1.31 Tolerance mm : + 0.20	control lever position degree : 58.0 tolerance degree : + 4.0 control lever position degree : 111.0 tolerance degree : + 4.0 RATED SPEED
WITH GOVERNOR GUIDE SLEEVE TRAVEL Rated speed rpm : 250 guide sleeve travel mm : 1.31 Tolerance mm : + 0.20 Rated speed rpm : 1005	control lever position degree : 58.0 tolerance degree : + 4.0 control lever position degree : 111.0 tolerance degree : + 4.0 RATED SPEED rack travel mm : 9.35
WITH GOVERNOR GUIDE SLEEVE TRAVEL Rated speed rpm : 250 guide sleeve travel mm : 1.31 Tolerance mm : + 0.20 Rated speed rpm : 1005 guide sleeve	control lever position degree : 58.0 tolerance degree : + 4.0 control lever position degree : 111.0 tolerance degree : + 4.0 RATED SPEED rack travel mm : 9.35 Rated speed rpm : 995
WITH GOVERNOR GUIDE SLEEVE TRAVEL Rated speed rpm : 250 guide sleeve travel mm : 1.31 Tolerance mm : + 0.20 Rated speed rpm : 1005 guide sleeve travel mm : 7.25	control lever position degree : 58.0 tolerance degree : + 4.0 control lever position degree : 111.0 tolerance degree : + 4.0 RATED SPEED rack travel mm : 9.35
WITH GOVERNOR GUIDE SLEEVE TRAVEL Rated speed rpm : 250 guide sleeve travel mm : 1.31 Tolerance mm : + 0.20 Rated speed rpm : 1005 guide sleeve	control lever position degree : 58.0 tolerance degree : + 4.0 control lever position degree : 111.0 tolerance degree : + 4.0 RATED SPEED rack travel mm : 9.35 Rated speed rpm : 995 Tolerance 1/min : + 5
WITH GOVERNOR GUIDE SLEEVE TRAVEL Rated speed rpm : 250 guide sleeve travel mm : 1.31 Tolerance mm : + 0.20 Rated speed rpm : 1005 guide sleeve travel mm : 7.25 Tolerance mm : + 0.15	control lever position degree : 58.0 tolerance degree : + 4.0 control lever position degree : 111.0 tolerance degree : + 4.0 RATED SPEED rack travel mm : 9.35 Rated speed rpm : 995 Tolerance 1/min : + 5 rack travel mm : 4.00
WITH GOVERNOR GUIDE SLEEVE TRAVEL Rated speed rpm : 250 guide sleeve travel mm : 1.31 Tolerance mm : + 0.20 Rated speed rpm : 1005 guide sleeve travel mm : 7.25 Tolerance mm : + 0.15	control lever position degree : 58.0 tolerance degree : + 4.0 control lever position degree : 111.0 tolerance degree : + 4.0 RATED SPEED rack travel mm : 9.35 Rated speed rpm : 995 Tolerance 1/min : + 5 rack travel mm : 4.00
GUIDE SLEEVE TRAVEL Rated speed rpm : 250 guide sleeve travel mm : 1.31 Tolerance mm : + 0.20 Rated speed rpm : 1005 guide sleeve travel mm : 7.25 Tolerance mm : + 0.15 Rated speed rpm : 673 guide sleeve travel mm : 4.96	control lever position degree : 58.0 tolerance degree : + 4.0 control lever position degree : 111.0 tolerance degree : + 4.0 RATED SPEED rack travel mm : 9.35 Rated speed rpm : 995 Tolerance 1/min : + 5 rack travel mm : 4.00 Rated speed rpm : 1115 Tolerance 1/min : + 15
GUIDE SLEEVE TRAVEL Rated speed rpm : 250 guide sleeve travel mm : 1.31 Tolerance mm : + 0.20 Rated speed rpm : 1005 guide sleeve travel mm : 7.25 Tolerance mm : + 0.15 Rated speed rpm : 673 guide sleeve	control lever position degree : 58.0 tolerance degree : + 4.0 control lever position degree : 111.0 tolerance degree : + 4.0 RATED SPEED rack travel mm : 9.35 Rated speed rpm : 995 Tolerance 1/min : + 5 rack travel mm : 4.00 Rated speed rpm : 1115 Tolerance 1/min : + 15 rack travel mm : 0.50
GUIDE SLEEVE TRAVEL Rated speed rpm : 250 guide sleeve travel mm : 1.31 Tolerance mm : + 0.20 Rated speed rpm : 1005 guide sleeve travel mm : 7.25 Tolerance mm : + 0.15 Rated speed rpm : 673 guide sleeve travel mm : 4.96 Tolerance mm : + 0.25	control lever position degree : 58.0 tolerance degree : + 4.0 control lever position degree : 111.0 tolerance degree : + 4.0 RATED SPEED rack travel mm : 9.35 Rated speed rpm : 995 Tolerance 1/min : + 5 rack travel mm : 4.00 Rated speed rpm : 1115 Tolerance 1/min : + 15 rack travel mm : 0.50 Tolerance mm : + 0.50
GUIDE SLEEVE TRAVEL Rated speed rpm : 250 guide sleeve travel mm : 1.31 Tolerance mm : + 0.20 Rated speed rpm : 1005 guide sleeve travel mm : 7.25 Tolerance mm : + 0.15 Rated speed rpm : 673 guide sleeve travel mm : 4.96 Tolerance mm : + 0.25 Rated speed rpm : 4.96 Tolerance mm : + 0.25	control lever position degree : 58.0 tolerance degree : + 4.0 control lever position degree : 111.0 tolerance degree : + 4.0 RATED SPEED rack travel mm : 9.35 Rated speed rpm : 995 Tolerance 1/min : + 5 rack travel mm : 4.00 Rated speed rpm : 1115 Tolerance 1/min : + 15 rack travel mm : 0.50
WITH GOVERNOR GUIDE SLEEVE TRAVEL Rated speed rpm : 250 guide sleeve travel mm : 1.31 Tolerance mm : + 0.20 Rated speed rpm : 1005 guide sleeve travel mm : 7.25 Tolerance mm : + 0.15 Rated speed rpm : 673 guide sleeve travel mm : 4.96 Tolerance mm : + 0.25 Rated speed rpm : 4.96 Tolerance mm : + 0.25	control lever position degree : 58.0 tolerance degree : + 4.0 control lever position degree : 111.0 tolerance degree : + 4.0 RATED SPEED rack travel mm : 9.35 Rated speed rpm : 995 Tolerance 1/min : + 5 rack travel mm : 4.00 Rated speed rpm : 1115 Tolerance 1/min : + 15 rack travel mm : 0.50 Tolerance mm : + 0.50
WITH GOVERNOR GUIDE SLEEVE TRAVEL Rated speed rpm : 250 guide sleeve travel mm : 1.31 Tolerance mm : + 0.20 Rated speed rpm : 1005 guide sleeve travel mm : 7.25 Tolerance mm : + 0.15 Rated speed rpm : 673 guide sleeve travel mm : 4.96 Tolerance mm : + 0.25 Rated speed rpm : 420 guide sleeve travel mm : 420 guide sleeve travel mm : 3.37	control lever position degree : 58.0 tolerance degree : + 4.0 control lever position degree : 111.0 tolerance degree : + 4.0 RATED SPEED rack travel mm : 9.35 Rated speed rpm : 995 Tolerance 1/min : + 5 rack travel mm : 4.00 Rated speed rpm : 1115 Tolerance 1/min : + 15 rack travel mm : 0.50 Tolerance mm : + 0.50
WITH GOVERNOR GUIDE SLEEVE TRAVEL Rated speed rpm : 250 guide sleeve travel mm : 1.31 Tolerance mm : + 0.20 Rated speed rpm : 1005 guide sleeve travel mm : 7.25 Tolerance mm : + 0.15 Rated speed rpm : 673 guide sleeve travel mm : 4.96 Tolerance mm : + 0.25 Rated speed rpm : 4.96 Tolerance mm : + 0.25	control lever position degree : 58.0 tolerance degree : + 4.0 control lever position degree : 111.0 tolerance degree : + 4.0 RATED SPEED rack travel mm : 9.35 Rated speed rpm : 995 Tolerance 1/min : + 5 rack travel mm : 4.00 Rated speed rpm : 1115 Tolerance 1/min : + 15 rack travel mm : 0.50 Tolerance mm : + 0.50 Rated speed rpm : 1250
WITH GOVERNOR GUIDE SLEEVE TRAVEL Rated speed rpm : 250 guide sleeve travel mm : 1.31 Tolerance mm : + 0.20 Rated speed rpm : 1005 guide sleeve travel mm : 7.25 Tolerance mm : + 0.15 Rated speed rpm : 673 guide sleeve travel mm : 4.96 Tolerance mm : + 0.25 Rated speed rpm : 420 guide sleeve travel mm : 420 guide sleeve travel mm : 3.37	control lever position degree : 58.0 tolerance degree : + 4.0 control lever position degree : 111.0 tolerance degree : + 4.0 RATED SPEED rack travel mm : 9.35 Rated speed rpm : 995 Tolerance 1/min : + 5 rack travel mm : 4.00 Rated speed rpm : 1115 Tolerance 1/min : + 15 rack travel mm : 0.50 Tolerance mm : + 0.50

		_
control lever position degree tolerance degree		START CUT-OUT
control lever position degree tolerance degree		Rated speed rpm : > 100 Rated speed rpm : < 170 Check speed 1/min : > 80
Testing:		+ Check + speed 1/min : < 190
Rated speed rpm rack travel mm Tolerance mm	: 250 : 5.60 : + 0.10	FUEL DELIVERY CHARACTERISTICS
Rated speed rpm	: 150	Aneroid pressure
CRT mm min.	: > 7.00	+ hPa : 1500 + Rated speed rpm : 950 + Del. quantity
Rated speed rpm	: 300	cm3/1000 strokes : 216.0 Tolerance
TORQUE CONTROL		
Rated speed rpm rack travel mm Tolerance mm	: 10.35	+ Aneroid pressure + hPa : -
Rated speed rpm rack travel mm Tolerance mm	: 10.35	Rated speed rpm : 500 Del. quantity cm3/1000 strokes : 153.0 Tolerance cm3/1000 strokes : + 1.0
ANEROID/ALTITUDE COMPENSATOR TEST		
SETTING		BREAKAWAY
Rated speed rpm Pressure hPa rack travel mm Tolerance mm	: 500 : 1500 : 10.35 : + 0.05	Rack travel in mm: 9.35 Rated speed rpm: 995 Tolerance 1/min: + 5
MEASUREMENT		STARTING FUEL DELIVERY
Pressure hPa Rated speed rpm rack travel mm Tolerance mm		Rated speed rpm : 100 rack travel mm : 20.50 Tolerance mm : +- 0.50 Del. quantity
Rated speed rpm	: 500	+ cm3/1000 strokes : 170.0
Pressure hPa rack travel mm Tolerance mm	: 260 : 8.80 : + 0.15	+ Tolerance + cm3/1000 strokes : +- 20.0 + Check tolerance + cm3/1000S. : +- 24.0
Pressure hPa rack travel mm Tolerance mm	: 430 : 9.80 : +- 0.05	+

LOW IDLE

Rated speed rpm	:	250
rack travel mm	:	5.60
Tolerance mm	: +-	0.30
Del. quantity		
cm3/1000 strokes	:	16.0
Tolerance		
cm3/1000 strokes	: +-	- 3.0
Check tolerance		
cm3/1000\$.	: +-	- 6.0
Spreed		
Tolerance		
cm3/1000 strokes	:	4.0
Check tolerance		
cm3/1000s.	:	8.0

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

: 08.02.96 Edition Test oil : ISO 4113

Combination No. : 0 402 946 302

Injection pump

Pump designation : PES6P120A720LS8514 EP type number : 0 412 926 210

Governor

Governer design. : RQV250...950PA1209K

Governer no. : 0 421 815 972

Cust. part No. : 1369074

Customer-spec. information Customer : SCANIA : DSC1206 Motor

TEST BENCH REQUIREMENTS

Inlet line : EHAB

Test oil inlet

temp. °C Tolerance °C 2.0

Overflow valve : 2 417 413 082

Inlet press. bar : 2.5

Test nozzle holde

: 1 688 901 104 assembly

Opening pressure

251.5 Tolerance bar : +- 1.5

Test Lines : 1 680 750 008

Outside diameter : 6.0

x inside diameter: 2.0 x length mm : 600

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant.

per values _____

BEGINNING OF DELIVERY

Test pressure bar : 26.0 Tolerance bar : + 1.0

Prestroke mm 4.00 : +- 0.05 Tolerance mm Check

: + - 0.10tolerance mm

Rack travel in mm : 10.50 Tolerance mm : + 1.50

Firing order : 1-5-3-6-2-

Phasing : 0-60-120-180-240

: -300

Tolerance : +- 0.30

Check

tolerance °NW : ← 0.50

Start of delivery blocking

*NW after s.o.d. : 180.00 : **←** 0.50 Tolerance

Check

tolerance °NW : **←** 0.75

: 1 Barrel no.

BASIC SETTING

825 Rated speed rpm :

Rack travel in mm: 13.45

: +- 0.05 Tolerance mm

Del. quantity

cm3/1000 strokes : 375.0

J28

Tolerance		+ Rated speed rpm : 390
cm3/1000 strokes	; +- 1.0	+ Rated speed rpm : 390 + guide sleeve
Check tolerance		travel mm : 3.50
cm3/1000s.	: +- 11.0	+ Tolerance mm : + 0.25
•		1740
Spreed Tolerance		+ Rated speed rpm : 1310 + guide sleeve
cm3/1000 strokes	: 8.0	travel mm : 13.50
		+ Tolerance mm : + 0.50
Check tolerance	4/ 0	†
cm3/1000s.	: 14.0	GUIDE SLEEVE POSITION
Rated speed rpm	: 250	T GOIDE SEELVE POSITION
,		Rated speed rpm : 1154
Rack travel in mm		13.45
Tolerance mm Del. quantity	: +- 0.30	Rack travel in mm: 12.45 Tolerance mm: + 1.30
cm3/1000 strokes	: 22.0	+ roceratice inti
Tolerance		
cm3/1000 strokes	: +- 3.0	+ FULL LOAD DELIVERY AT FULL LOAD STOP
Check tolerance cm3/1000s.	: +- 6.0	Rated speed rpm : 825
Spreed		Aneroid pressure
Tolerance		+ hPa : 1500
cm3/1000 strokes	: 4.0	+ Del. quantity
Check tolerance cm3/1000s.	: 8.0	+ cm3/1000 strokes : 375.0 + Tolerance
(1107 10003)	. 0.0	= cm3/1000 strokes : + 1.0
		+ Check tolerance
(B) SETTING OF IN	JECTION PUMP	+ cm3/1000s. : + 11.0
WITH GOVERNOR		+ Spreed + Tolerance
		+ cm3/1000 strokes : 8.0
GUIDE SLEEVE TRAV	EL	- Check tolerance
	250	+ cm3/1000s. : 14.0
Rated speed rpm guide sleeve	: 250	İ
travel mm	: 1.67	
Tolerance mm	: ← 0.20	CONTROL LEVER
But all amount man	4047	† antast laws
Rated speed rpm guide sleeve	: 1017	+ control lever + position degree : 61.0
travel mm	: 9.08	tolerance degree : +- 4.0
Tolerance mm	: + 0.15	+
Data dama adams		+ control lever + position degree : 115.0
Rated speed rpm guide sleeve	: 661	+ position degree : 115.0 + tolerance degree : + 4.0
travel mm	: 5.50	+ cocci ance degree
Tolerance mm	: +- 0.25	RATED SPEED
Datad annal ann	: 302	+ rack travel mm : 11.70
Rated speed rpm guide sleeve	: 302	Rated speed rpm : 995
travel mm	: 2.44	+ Tolerance 1/min : + 5
Tolerance mm	: + 0.25	+
Datad anada	• 352	+ rack travel mm : 4.00 + Rated speed rpm : 1110
Rated speed rpm guide sleeve	: 352	+ Rated speed rpm : 1110 + Tolerance 1/min : + 15
travel mm	: 3.14	+
Tolerance mm	: +- 0.25	+ rack travel mm : 0.50

Tolerance mm Rated speed rpm	: ← 0.50 : 1200	‡	Tolerance mm Rated speed rpm	
		<u></u>	nated speed (pill	. 025
LOW IDLE		<u> </u>	Pressure hPa rack travel mm Tolerance mm	: 435 : 8.90 : +- 0.15
control lever position degree tolerance degree		+	Pressure hPa rack travel mm Tolerance mm	: 10.10
control lever position degree tolerance degree	: 18.0 : ← 4.0	† †	START CUT-OUT	100
Testing:		Ī	Rated speed rpm Rated speed rpm	
Rated speed rpm rack travel mm Tolerance mm	: 4.60	+	Check speed 1/min Check	
Rated speed rpm	: 150	Ī	speed 1/min	: < 190
CRT mm min.	: > 6.10	Ī	FUEL DELIVERY CHA	RACTERISTICS
Rated speed rpm	: 275		Aneroid pressure hPa Rated speed rpm	: 1500
TORQUE CONTROL		<u> </u>	Del. quantity cm3/1000 strokes	
Rated speed rpm rack travel mm Tolerance mm	: 13.45	+	Tolerance cm3/1000 strokes Check tolerance	: +- 4.0
Rated speed rpm rack travel mm Tolerance mm	: 650 : 12.50	†	cm3/1000s. Aneroid pressure hPa	: +- 11.0 : 1500
Rated speed rpm		Ţ	Rated speed rpm Del. quantity	: 950
rack travel mm Tolerance mm	: 12.75 : +- 0.10	1	cm3/1000 strokes Tolerance	: 331.0
			cm3/1000 strokes Check tolerance	
ANEROID/ALTITUDE COMPENSATOR TEST		+	cm3/1000s. Aneroid pressure	: +- 10.0
		i	ž	: -
SETTING		+	nPa Rated speed rpm Del. quantity	
Rated speed rpm Pressure hPa rack travel mm Tolerance mm	: 825 : 1500 : 13,45	+	cm3/1000 strokes Tolerance cm3/1000 strokes	
	: + 0.10	-} .	Check tolerance	: +- 4.0
MEASUREMENT		‡ .		
Pressure hPa Rated speed rpm rack travel mm	: - : 825 : 7.20	+ 1	BREAKAWAY	

Rack travel in mm: 11.70
Rated speed rpm: 995
Tolerance 1/min: + 5

STARTING FUEL DELIVERY

Rated speed rpm : 100 rack travel mm : 10.20 Tolerance mm : +- 0.50

LOW IDLE

250 Rated speed rpm : 4.60 rack travel mm : 0.30 Tolerance mm Del. quantity cm3/1000 strokes : 22.0 Tolerance cm3/1000 strokes : +-3.0 Check tolerance cm3/1000s. 6.0 Spreed Tolerance cm3/1000 strokes : 4.0 Check tolerance cm3/1000s. 8.0

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

: 08.03.96 Edition : ISO 4113 Test oil

Combination No. : 0 403 444 146

Injection pump

Pump designation : PES4MW100/720RS1127

EP type number : 0 413 404 103

Governor

Governer design. : RQV300...1300MW48-1 : 0 420 083 084 Governer no.

Cust. part No. : 0190742602

Customer-spec, information Customer : MB-NFZ Motor : OM 364 A Power KW : 85.0

TEST BENCH REQUIREMENTS

Inlet line : 3.1

Test oil inlet

temp. °C Tolerance °C 2.0

Overflow valve : 1 417 413 047

Inlet press. bar : 1.5

Test nozzle holde

: 1 688 901 101 assembly

Opening pressure

208.5 Tolerance bar 1.5

: 1 680 750 089 Test Lines

Outside diameter : 8.0 x inside diameter : 3.0 600 x length mm :

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant.

per values _____

BEGINNING OF DELIVERY

Test pressure bar : 31.0 Tolerance bar : + 1.0

Prestroke mm 3.75 Tolerance mm : +- 0.05

Check

tolerance mm : + 0.10

Rack travel in mm: 10.50 Tolerance mm : + 1.50

Firing order : 1-3-4-2

: 0-90-180-270 Phasing

: +- 0.50 Tolerance

Check

: +- 0.75 tolerance "NW

BASIC SETTING

1300 Rated speed rpm :

Rack travel in mm: 11.15 Tolerance mm : + 0.05

Del. quantity

cm3/1000 strokes : 83.0

Tolerance

cm3/1000 strokes : +- 1.0

Check tolerance

: +- 3.0 cm3/1000s.

Spreed

Tolerance

cm3/1000 strokes :

3.5

Check tolerance	t t	-
cm3/1000s.	: 6.0	- FULL LOAD DELIVERY AT FULL LOAD STOP
Rated speed rpm	: 300	- - Rated speed rpm : 1300
Rack travel in m		- Aneroid pressure
Tolerance mm Del. quantity	: + 0.10	- hPa : - - Del. quantity
cm3/1000 strokes Tolerance	: 11.0	- cm3/1000 strokes : 83.0 - Tolerance
cm3/1000 strokes	: + 2.0	cm3/1000 strokes : +- 1.0
Check tolerance cm3/1000s.	: + 4.0 ‡	- Check tolerance - cm3/1000s. : + 3.0
Spreed Tolerance	1	Spreed Tolerance
cm3/1000 strokes	: 3.5	cm3/1000 strokes : 3.5
Check tolerance cm3/1000s.	: 5.5	Check tolerance cm3/1000s. : 6.0
cm3/10008.	; 5.5	
(B) SETTING OF IN	NUECTION PUMP +	•
WITH GOVERNOR	1	CONTROL LEVER
		control lever
GUIDE SLEEVE TRAN	VEL †	position degree : 94.0 tolerance degree : +- 4.0
Rated speed rpm	: 300	toterance degree : +- 4.5
guide sleeve	+	RATED SPEED
travel mm	: 1.37	
Tolerance mm	: +- 0.20 +	rack travel mm : 10.10 Rated speed rpm : 1345
Rated speed rpm	: 1354 I	Tolerance 1/min : +- 5
guide sleeve	+	
travel mm	: 8.65	rack travel mm : 4.00
Tolerance mm	: + 0.15	Rated speed rpm : 1445 Tolerance 1/min : +- 15
Rated speed rpm	: 885	Toterance Triming : +- 15
guide sleeve	+	rack travel mm : 0.50
travel mm	: 5.01	Tolerance mm : + 0.50
Tolerance mm	: ← 0.25	Rated speed rpm : 1550
Rated speed rpm	: 490	
guide sleeve travel mm	: 2.86	LOW IDLE
Tolerance mm	: + 0.25	2011
Rated speed rpm	: 1610	control lever
guide sleeve	+	position degree : 66.0
travel mm		tolerance degree : + 4.0
Tolerance mm	: + 0.50	Testing:
CUITAGE OF FELLE BOOT	TTON	
GUIDE SLEEVE POSI	.110N	Rated speed rpm : 300 rack travel mm : 7.85
Rated speed rpm	: 1440	Tolerance mm : + 0.05
Rack travel in mm Tolerance mm		Rated speed rpm : 200
roterance mm	2.10	CRT mm min. : > 9.50

TORQUE CONTROL Rated speed rpm 1300 rack travel mm 11.15 0.05 Tolerance mm 750 Rated speed rpm 12.00 rack travel mm : + - 0.10Tolerance am 585 Rated speed rpm 12.20 rack travel mm : + 0.10Tolerance mm 1000 Rated speed rpm rack travel mm 11.20 Tolerance mm : + 0.10START CUT-OUT Rated speed rpm 100 Rated speed rpm ; < 230 Check speed 1/min 80 Check 250 speed 1/min : < FUEL DELIVERY CHARACTERISTICS Aneroid pressure hPa 750 Rated speed rpm Del. quantity cm3/1000 strokes 80.0 Tolerance cm3/1000 strokes 1.5 Check tolerance cm3/1000s. 4.0 Spreed Tolerance 5.0 cm3/1000 strokes Check tolerance 7.0 cm3/1000s. Aneroid pressure hPa Rated speed rpm 585 Del. quantity cm3/1000 strokes 75.0 Tolerance

1.5

4.0

: +-

BREAKAWAY

Rack travel in mm : 10.10
Rated speed rpm : 1345
Tolerance 1/min : + 5

STARTING FUEL DELIVERY

Rated speed rpm : 100
Del. quantity
cm3/1000 strokes : 83.0
Tolerance
cm3/1000 strokes : +- 5.0
Check tolerance
cm3/1000s. : +- 8.0

LOW IDLE

Rated speed rpm 300 7.85 rack travel mm Tolerance mm 0.10 Del. quantity cm3/1000 strokes 11.0 Tolerance cm3/1000 strokes 2.0 Check tolerance cm3/1000s. 4.0 Spreed Tolerance 3.5 cm3/1000 strokes Check tolerance 5.5 cm3/1000s.

End of test specification sheet

cm3/1000 strokes Check tolerance cm3/1000s.

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

Edition : 12.03.96 : ISO 4113 Test oil

Combination No. : 0 403 476 145

Injection pump

Pump designation : PES6MW100/320RS1244 EP type number : 0 413 406 244

Governor

Governer design. : RSV300...1100MW1A399

Governer no. : 0 420 085 289

Cust. part No. :

Customer-spec. information Customer : SISU Motor : 634 DWE Power KW : 154.0

TEST BENCH REQUIREMENTS

Inlet line : 3.1

Test oil inlet

temp. °C 40 Tolerance °C 2.0

Overflow valve : 1 417 413 047

Inlet press. bar : 1.5

Test nozzle holde

: 1 688 901 101 assembly

Opening pressure

208.5 bar Tolerance bar : +- 1.5

Test lines : 1 680 750 008

Outside diameter : 6.0

x inside diameter: 2.0 x length mm : 600

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant. per values ____

BEGINNING OF DELIVERY

31.0 Test pressure bar : Tolerance bar : + 1.0

Prestroke mm Tolerance mm : 3.55 : +- 0.05 Check tolerance mm : +- 0.10

Rack travel in mm : 10.50 Tolerance mm : +- 1.50

Firing order : 1-5-3-6-2-

: 4

: 0-60-120-180-240 Phasing

: -300

Tolerance : +- 0.50

Check

tolerance *NW : **←** 0.75

Start of delivery blocking

Barrel no. : 1

BASIC SETTING

Rated speed rpm : 1075

Rack travel in mm: 12.10 : + 0.05 Tolerance mm

Del. quantity

cm3/1000 strokes : 140.0

Tolerance

cm3/1000 strokes : +- 1.0

Check tolerance cm3/1000s. : +- 4.0

Barrard .	†
Spreed Tolerance	+ CONTROL LEVER
cm3/1000 strokes : 4.0	T CONTROL LEVER
	+ control lever
Check tolerance	position degree : 112.0
cm3/1000s. : 7.5	+ tolerance degree : + 4.0
	+
Rated speed rpm : 500	+ RATED SPEED
4	+
Rack travel in mm: 4.30	+ rack travel mm : 11.10
Tolerance mm : + 0.20	Rated speed rpm : 1130
Del. quantity cm3/1000 strokes : 11.0	Tolerance 1/min : + 5
Tolerance	Track travel mm : 4.00
cm3/1000 strokes : +- 2.0	Rated speed rpm : 1180
Check tolerance	Tolerance 1/min : + 15
cm3/1000s. : + 4.5	
Spreed	rack travel mm : 1.00
Tolerance	Tolerance mm : + 0.70
cm3/1000 strokes : 3.5	Rated speed rpm : 1300
Check tolerance	+
cm3/1000s. : 5.5	rack travel mm : 4.00
	Rated speed rpm : 1190
(B) SETTING OF INJECTION PUMP	†
WITH GOVERNOR	<u> </u>
WITH GOVERNOR	LOW IDLE
	LOW IDEC
	1
GUIDE SLEEVE POSITION	control lever
•	position degree : 84.0
Rated speed rpm : 800	tolerance degree : +- 4.0
Rack travel in mm: 0.65	Setting point w/out bumper spring
Tolerance mm : + 0.35	Datadanas 500
	+ Rated speed rpm : 500 + rack travel mm : 3.80
governor spring - pre-tension -	T rack travet mm : 5.00
click setting x : 5.50	Testing:
ctick setting x . Siso	tesering.
	Rated speed rpm : 500
FULL LOAD DELIVERY AT FULL LOAD STOP	rack travel mm : 4.30
	Tolerance mm : +- 0.10
Rated speed rpm : 1075	t
Aneroid pressure	rack travel mm : 2.00
hPa : 1200 -	Rated speed rpm : 560
Del. quantity - cm3/1000 strokes : 140.0 -	Tolerance 1/min : +- 30
cm3/1000 strokes : 140.0 - Tolerance -	
cm3/1000 strokes : + 1.0	TORQUE CONTROL
Check tolerance	TOTAL VOTTITOE
cm3/1000s. : +- 4.0	Rated speed rpm : 1075
Spreed	rack travel mm : 12.10
Tolerance -	Tolerance mm : +- 0.05
cm3/1000 strokes : 4.0 -	<u> </u>
Check tolerance -	Rated speed rpm : 600
cm3/1000s. : 7.5	rack travel mm : 12.10
7	Tolerance mm : +- 0.10
7	Г

ANEROID/ALTITUDE COMPENSATOR TEST

SETTING

Rated speed rpm : 500
Pressure hPa : 1000
rack travel mm : 12.10
Tolerance mm : +- 0.10

MEASUREMENT

Pressure hPa : Rated speed rpm : 500
rack travel mm : 9.90
Tolerance mm : + 0.05

Rated speed rpm : 500

Pressure hPa : 750
rack travel mm : 11.50
Tolerance mm : + 0.15

Pressure hPa : 400 rack travel mm : 10.25 Tolerance mm : + 0.05

FUEL DELIVERY CHARACTERISTICS

Aneroid pressure

hPa : 1200 Rated speed rpm : 600

Del. quantity

cm3/1000 strokes : 146.0

Tolerance

cm3/1000 strokes : +- 2.0

Check tolerance

cm3/1000s. \div 5.0

Spreed

Tolerance

cm3/1000 strokes : 6.0

Check tolerance

cm3/1000s. : 9.0

Aneroid pressure

hPa : -Rated speed rpm : 500

Del. quantity

cm3/1000 strokes : 94.5

Tolerance

cm3/1000 strokes : + 1.0

Check tolerance

cm3/1000s. : +- 3.0

BREAKAWAY

Rack travel in mm: 11.10
Rated speed rpm: 1130
Tolerance 1/min: + 5

STARTING FUEL DELIVERY

Rated speed rpm : 100
Del. quantity
cm3/1000 strokes : 130.0
Tolerance
cm3/1000 strokes : +- 5.0
Check tolerance
cm3/1000s. : +- 8.0

LOW IDLE

Rated speed rpm 500 : 4.30 rack travel mm 0.20 Tolerance mm Del. quantity cm3/1000 strokes 11.0 Tolerance cm3/1000 strokes : +-2.0 Check tolerance cm3/1000s. 4.5 Spreed Tolerance cm3/1000 strokes : 3.5 Check tolerance cm3/1000s. 5.5

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

Edition : 20.03.96 Test oil : ISO 4113

Combination No. : 0 400 876 434

Injection pump

Pump designation : PES6A95D41DRS2864 EP type number : 0 410 896 888

Governor

Governer design. : RSV400...1050A8C2263

: -11L

Governer no. : 0 420 232 635

Cust. part No. : 87 800 972

Customer-spec. information Customer : NH Motor : P 396 Power KW : 172.0

TEST BENCH REQUIREMENTS

Inlet line : 1.3

Test oil inlet

temp. °C : 40 Tolerance °C : +- 2.0

Overflow valve : 1 419 992 198

Inlet press. bar : 1.5

Test nozzle holde

assembly : 1 688 901 101

Opening pressure

bar : 208.5 Tolerance bar : + 1.5

Test lines : 1 680 750 008

Outside diameter : 6.0

x inside diameter: 2.0 x length mm : 600

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant.

per values ____

BEGINNING OF DELIVERY

Test pressure bar : 26.0 Tolerance bar : + 1.0

Prestroke mm : 2.60
Tolerance mm : + 0.05
Check

tolerance mm : \leftarrow 0.10

Rack travel in mm : 10.50 Tolerance mm : ← 1.50

Firing order : 1-5-3-6-2-

: 4

Phasing : 0-60-120-180-240

: -300

BASIC SETTING

Rated speed rpm : 700

Rack travel in mm : 13.50
Tolerance mm : +- 0.05

Del. quantity cm3/1000 strokes : 132.5

Tolerance

cm3/1000 strokes : + 1.0

Check tolerance cm3/1000s. : +- 3.0

Spreed

Tolerance

cm3/1000 strokes : 3.5

3.5

Check tolerance cm3/1000s.	: 8.0	+ Tolerance mm + Rated speed rpm	: ← 0.55 : 1300
Rated speed rpm		Rated speed rpm rack travel mm	: 1079 : 11.35
Rack travel in mm Tolerance mm Del. quantity		+ Rated speed rpm + Tolerance 1/min	: 1154
cm3/1000 strokes Tolerance	: 15.0	+ rack travel mm	
cm3/1000 strokes Check tolerance		rack travel mm Tolerance mm	
cm3/1000s. Spreed Tolerance	: ← 4.5	Rated speed rpm	
cm3/1000 strokes Check tolerance		Rated speed rpm rack travel mm	: 11.35
cm3/1000s.	: 9.0	Rated speed rpm Tolerance 1/min rack travel mm	: 5
(B) SETTING OF IN WITH GOVERNOR	JECTION PUMP	rack travel mm Tolerance mm	: ← 0.55
***************************************		Rated speed rpm	
GUIDE SLEEVE POSI governor spring	TION	Rated speed rpm rack travel mm	: 1081 : 11.35
pre-tension click setting x	: 4.50	Rated speed rpm Tolerance 1/min rack travel mm	: +- 5
FULL LOAD DELIVER	Y AT FULL LOAD STOP	+ rack travel mm + Tolerance mm	
Rated speed rpm Aneroid pressure	: 700	Rated speed rpm	
hPa Del. quantity cm3/1000 strokes	: 1200 : 132.5	Rated speed rpm rack travel mm	: 1082 : 11.35
Tolerance cm3/1000 strokes	: + 1.0	Rated speed rpm Tolerance 1/min	: +- 5
Check tolerance cm3/1000s. Spreed	: +- 3.0	rack travel mm	: 0.85
Tolerance cm3/1000 strokes Check tolerance	: 3.5	+ Tolerance mm + Rated speed rpm	
cm3/1000s.	: 8.0	Rated speed rpm rack travel mm	
ASSEMBLY GOVERNOR	SETTING	Rated speed rpm Tolerance 1/min	
Rated speed rpm rack travel mm	: 1078 : 11.35	+ rack travel mm	: 4.00
Rated speed rpm Tolerance 1/min rack travel mm	: +- 5	rack travel mm Tolerance mm Rated speed rpm	: +- 0.55
rack travel mm	: 0.85	+ LOW IDLE	

Testing:

Rated speed rpm 450 rack travel mm 5,50 Tolerance mm : + 0.10

rack travel mm 2.00 Rated speed rom 600 Tolerance 1/min

TORQUE CONTROL

Rated speed rpm 700 13.50 rack travel mm Tolerance mm : +- 0.05

500 Rated speed rpm 13.55 rack travel mm Tolerance mm : + 0.10

1025 Rated speed rpm 11.20 rack travel mm : +- 0.05 Tolerance mm

Rated speed rpm 1025 12.35 rack travel mm : + - 0.10Tolerance mm

ANEROID/ALTITUDE COMPENSATOR TEST

SETTING

Rated speed rpm 500 Pressure hPa 1200 rack travel mm 13.55 0.10 Tolerance mm

MEASUREMENT

Pressure hPa Rated speed rpm 500 rack travel mm 9.70 0.05 Tolerance mm

Rated speed rpm 500

Pressure hPa 650 rack travel mm 12.50 Tolerance mm : +- 0.05

Pressure hPa 450 11.00 rack travel mm Tolerance mm : +- 0.20

FUEL DELIVERY CHARACTERISTICS

Aneroid pressure

hPa Rated speed rpm 500 Del. quantity

cm3/1000 strokes : 81.0 Tolerance

cm3/1000 strokes

: +-1.0 Check tolerance cm3/1000s. 3.0

STARTING FUEL DELIVERY

Rated speed rpm 100 Del. quantity

cm3/1000 strokes : 160.0

Tolerance

cm3/1000 strokes : +-8.0

Check tolerance

cm3/1000s. : + 11.0

LOW IDLE

450 Rated speed rpm 5.50 rack travel mm : + - 0.10Tolerance mm Del. quantity cm3/1000 strokes : 15.0 Tolerance cm3/1000 strokes 2.0 Check tolerance cm3/1000s. 4.5 Spreed Tolerance 5.5 cm3/1000 strokes : Check tolerance cm3/1000s. 9.0

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

Edition : 14.03.96 Test oil : ISO 4113

Combination No. : 0 402 076 792

Injection pump

Pump designation : PES6P12DA72ORS3367 EP type number : 0 412 026 788

Governor

Governer design. : RSV400...1100P2A599

: -7

Governer no. : 0 421 833 527

Cust. part No. : RE66244

Customer-spec. information
Customer : DEERE
Motor : 6081AF001
Power KW : 168.0

TEST BENCH REQUIREMENTS

Inlet line : 4.2

Test oil inlet

temp. °C : 40 Tolerance °C : + 2.0

Overflow valve : 1 457 413 010

Inlet press. bar : 2.0
Tolerance bar : +- 0.1

Test nozzle holde

assembly : 1 688 901 101

Opening pressure

bar : 208.5 Tolerance bar : + 1.5

Test lines : 1 680 750 015

Outside diameter : 6.0

x inside diameter: 3.0 x length mm : 600

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant.

per values ____

BEGINNING OF DELIVERY

Test pressure bar : 17.0 Tolerance bar : + 1.0

Prestroke mm : 3.60
Tolerance mm : + 0.05
Check

tolerance mm : + 0.10

Rack travel in mm : 10.50 Tolerance mm : + 1.50

Firing order : 1-5-3-6-2-

: 4

Phasing : 0-60-120-180-240

: -300

Tolerance : + 0.30

Check

tolerance °NW : +- 0.75

Start of delivery mark

*NW after s.o.d. : 6.75Tolerance : \leftarrow 0.50

Check

tolerance °NW : + 0.75

Barrel no. : 1

Beginning of delivery differende

and maximum rack

travel : 14.00 Difference ° CS : 2.50

BASIC SETTING

Rated speed rpm : 1100 +	Tolerance
	cm3/1000 strokes : +- 1.0
Rack travel in mm: 12.10	Check tolerance cm3/1000s. : +- 3.0
Tolerance mm : + 0.05	Spreed
+	Tolerance
Del. quantity +	cm3/1000 strokes : 4.0
cm3/1000 strokes : 151.0 +	Check tolerance
Tolerance	cm3/1000s. : 6.5
cm3/1000 strokes : + 1.0 +	
Check tolerance	CONTROL LEVER
cm3/1000s. : +- 3.0 +	control lever
Spreed	position degree : 95.0
Tolerance	tolerance degree : +- 4.0
cm3/1000 strokes : 4.0 +	•
	RATED SPEED
Check tolerance + cm3/1000s. : 6.5	rack travel mm : 11.10
	Rated speed rpm : 1160
Del. quantity	Tolerance 1/min : + 5
cm3/1000 strokes : 30.5	
Tolerance	rack travel mm : 4.00
cm3/1000 strokes : + 2.0 +	Rated speed rpm : 1210 Tolerance 1/min : +- 5
Check tolerance + 4.5 +	Toterance Timin : +- 3
Spreed	rack travel mm : 0.85
Tolerance	Tolerance mm : + 0.55
cm3/1000 strokes : 6.0 +	Rated speed rpm : 1350
Check tolerance + cm3/1000s. : 8.0 +	rack travel mm : 4.00
cm3/1000s. : 8.0	Rated speed rpm : 1210
+	
(B) SETTING OF INJECTION PUMP	
WITH GOVERNOR +	LOW IDLE
Ĭ	TOM TAFE
GUIDE SLEEVE POSITION +	control lever
+	position degree : 69.0
Rated speed rpm : 800	tolerance degree : +- 4.0
Rack travel in mm: 0.50	Setting point w/out bumper spring
Tolerance mm : +- 0.20	
+	Rated speed rpm : 400
governor spring	rack travel mm : 5.10
pre-tension tick setting x : 3.00	Testing:
terex secting x . 3.00	rescrig.
	Rated speed rpm : 400
FULL LOAD DELIVERY AT FULL LOAD STOP	rack travel mm : 5.60
Rated speed rpm : 1100	Tolerance mm : +- 0.10
Rated speed rpm : 1100 + Aneroid pressure	Rated speed rpm : 100
hPa : 1200	impa dece i biii i ide
Del. quantity	CRT mm min. : > 19.00
cm3/1000 strokes : 151.0 +	

TORQUE CONTROL

1100 Rated speed rom ; rack travel mm 12.10 Tolerance mm : +- 0.05

700 Rated speed rpm rack travel mm 13.00 Tolerance mm : + 0.10

ANEROID/ALTITUDE COMPENSATOR TEST

SETTING

Rated speed rpm 500 Pressure hPa 1200

MEASUREMENT

Pressure hPa 500 Rated speed rpm 9.50 rack travel mo : + 0.10Tolerance mm

500 Rated speed rpm :

760 Pressure hPa 12.00 rack travel mm : +- 0.20 Tolerance mm

350 Pressure hPa rack travel mm 10.30 : + - 0.05Tolerance mm

FUEL DELIVERY CHARACTERISTICS

Aneroid pressure

1200 hPa Rated speed rom 700 :

Del. quantity

cm3/1000 strokes : 172.0

Tolerance

cm3/1000 strokes : +-2.0 Check tolerance

cm3/1000s. 4.0

Aneroid pressure

hPa Rated speed rpm 500

Del. quantity

cm3/1000 strokes : 94.5 Tolerance

2.0 cm3/1000 strokes : +-Check tolerance

cm3/1000s. : +--4.0

BREAKAWAY

Rack travel in mm : 11.10 Rated speed rpm : 1160 Tolerance 1/min : +- 5

STARTING FUEL DELIVERY

Rated speed rpm 100 20.50 rack travel mm : +- 0.50 Tolerance mm Del. quantity

cm3/1000 strokes : 105.0

Tolerance

cm3/1000 strokes : +- 20.0

Check tolerance

cm3/1000s. : +- 25.0

LOW IDLE

Del. quantity cm3/1000 strokes : 30.5 Tolerance cm3/1000 strokes : +- 2.0Check tolerance cm3/1000s. : +- 4.5 Spreed Tolerance cm3/1000 strokes : 6.0 Check tolerance cm3/1000s. 8.0

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

: 14.03.96 Edition : ISO 4113 Test oil

Combination No. : 0 402 076 793

Injection pump

Pump designation : PES6P120A720RS3367

EP type number : 0 412 026 788

Governor

Governer design. : RSV400...1100P2A599

: -8

: 0 421 833 528 Governer no.

Cust. part No. : RE66243

Customer-spec. information Customer : DEERE Motor : 6081AF001 Power KW : 168.0

TEST BENCH REQUIREMENTS

Inlet line : 4.2

Test oil inlet

temp. °C 40 Tolerance °C 2.0

Overflow valve : 1 457 413 010

Inlet press. bar : 2.0 Tolerance bar : +- 0.1

Test nozzle holde

: 1 688 901 101 assembly

Opening pressure

208.5 Tolerance bar

Test lines : 1 680 750 015

Outside diameter : 6.0

x inside diameter: 3.0 x length mm : 600

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant.

per values _____

BEGINNING OF DELIVERY

Test pressure bar : Tolerance bar : +- 1.0

Prestroke mm 3.60 : + 0.05Tolerance mm

Check

tolerance mm : + 0.10

Rack travel in mm: 10.50 Tolerance mm : +- 1.50

: 1-5-3-6-2-Firing order

Phasing : 0-60-120-180-240

: -300

Tolerance : + 0.30

Check

tolerance *NW : + 0.75

Start of delivery mark

*NW after s.o.d. : 6.75 Tolerance : +- 0.50

Check

tolerance °NW : +- 0.75

Barrel no.

: 1

Beginning of delivery differende

and maximum rack

14.00 travel Difference ° CS : 2.50

BASIC SETTING

Rated speed rpm : 1100	Tolerance cm3/1000 strokes : +- 1.0
Rack travel in mm: 12.10 Tolerance mm: + 0.05	Check tolerance cm3/1000S. : +- 3.0 Spreed
Del. quantity to the cm3/1000 strokes : 151.0	Tolerance cm3/1000 strokes : 4.0 Check tolerance
Tolerance	cm3/1000s. : 6.5
Check tolerance cm3/1000s. : +- 3.0	CONTROL LEVER
	control lever
Spreed Tolerance cm3/1000 strokes : 4.0	position degree : 95.0 tolerance degree : +- 4.0
Check tolerance	RATED SPEED
cm3/1000s. : 6.5	rack travel mm : 11.10 Rated speed rpm : 1160
Del. quantity + cm3/1000 strokes : 30.5	Tolerance 1/min : +- 5
Tolerance +	rack travel mm : 4.00
cm3/1000 strokes : + 2.0 + Check tolerance	Rated speed rpm : 1210 Tolerance 1/min : +- 5
cm3/1000s. : +- 4.5	roterance mini . +- 3
Spreed	rack travel mm : 0.85
Tolerance + cm3/1000 strokes : 6.0 +	Tolerance mm : + 0.55 Rated speed rpm : 1350
cm3/1000 strokes : 6.0 + Check tolerance +	Rated speed rpm : 1350
cm3/1000s. : 8.0	rack travel mm : 4.00 Rated speed rpm : 1210
(B) SETTING OF INJECTION PUMP WITH GOVERNOR	
‡	LOW IDLE
CUITE OF CENT DOCUTION	annimal Javan
GUIDE SLEEVE POSITION	control lever position degree : 69.0
Rated speed rpm : 800	tolerance degree : + 4.0
Rack travel in mm: 0.50 Tolerance mm: + 0.20	Setting point w/out bumper spring
governor spring pre-tension	Rated speed rpm : 400 rack travel mm : 5.10
click setting x : 3.00	Testing:
	Rated speed rpm : 400
FULL LOAD DELIVERY AT FULL LOAD STOP	rack travel mm : 5.60
Rated speed rpm : 1100	Tolerance mm : +- 0.10
Rated speed rpm : 1100 + Aneroid pressure +	Rated speed rpm : 100
hPa : 1200 +	, ,
Del. quantity	CRT mm min. : > 19.00
cm3/1000 strokes : 151.0	
ı	

TORQUE CONTROL

1100 Rated speed rpm rack travel mm 12.10 Tolerance mm : + 0.05

Rated speed rpm 700 13.00 rack travel mm : +- 0.10 Tolerance mm

ANEROID/ALTITUDE COMPENSATOR TEST

SETTING

Rated speed rpm 500 Pressure hPa 1200

MEASUREMENT

Pressure hPa Rated speed rpm 500 9.50 rack travel mm Tolerance mm : + 0.10

500 Rated speed rpm :

760 Pressure hPa rack travel mm 12.00 Tolerance mm : + 0.20

350 Pressure hPa 10.30 rack travel mm : +- 0.05 Tolerance mm

FUEL DELIVERY CHARACTERISTICS

Aneroid pressure

1200 hPa Rated speed rpm 700 :

Del. quantity cm3/1000 strokes : 172.0

Tolerance

cm3/1000 strokes : +-2.0

Check tolerance

cm3/1000s.: +- 4.0

Aneroid pressure

hPa 500 Rated speed rpm

Del. quantity

94.5 cm3/1000 strokes :

Tolerance

cm3/1000 strokes : +-2.0

Check tolerance cm3/1000s.

· +-4.0

BREAKAWAY

Rack travel in mm: 11.10 Rated speed rpm : 1160 Tolerance 1/min : +-

STARTING FUEL DELIVERY

Rated speed rpm : rack travel mm : 100 20.50 Tolerance mm : + 0.50 Del. quantity

cm3/1000 strokes : 105.0

Tolerance

cm3/1000 strokes : + 20.0

Check tolerance

cm3/1000s. : **←** 25.0

LOW IDLE

Del. quantity 30.5 cm3/1000 strokes : Tolerance cm3/1000 strokes : +-2.0 Check tolerance cm3/1000s. : +- 4.5

Spreed

Tolerance cm3/1000 strokes : 6.0

Check tolerance

cm3/1000s. 8.0

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

: 19.03.96 Edition Test oil : ISO 4113

Combination No. : 0 402 076 800

Injection pump

Pump designation : PES6P120A720RS3367 EP type number : 0 412 026 788

Governor

Governer design. : RSV450...1100P2A640

Governer no. : 0 421 833 552

Cust. part No. : RE66248

Customer-spec. information Customer : DEERE : 6081HDW04 Motor Power KW : 135.0

TEST BENCH REQUIREMENTS

Inlet line : 4.2

Test oil inlet

temp. °C Tolerance °C : + 2.0

Overflow valve : 1 457 413 010

Inlet press. bar : Tolerance bar : + 0.1

Test nozzle holde

assembly : 1 688 901 101

Opening pressure

: 208.5 Tolerance bar : +- 1.5

Test Lines : 1 680 750 015

Outside diameter : 6.0

x inside diameter: 3.0 x length mm : 600

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant.

per values _____

BEGINNING OF DELIVERY

Test pressure bar: 17.0 Tolerance bar : + 1.0

Prestroke mm : 3.60
Tolerance mm : + 0.05 Check

tolerance mm : +- 0.10

Rack travel in mm: 10.50 Tolerance mm : +- 1.50

Firing order : 1-5-3-6-2-

Phasing : 0-60-120-180-240

: -300

Tolerance : + 0.30

Check

tolerance °NW : + - 0.75

Start of delivery mark

*NW after s.o.d. : 7.50

: +- 0.50 Tolerance Check

tolerance °NW : + 0.75

Barrel no. : 1

Beginning of delivery differende

and maximum rack

travel 14.00 Difference * CS : 2.50

BASIC SETTING

Rated speed rpm : 1100

	+	Check tolerance
Rack travel in mm	1: 11.80	cm3/1000s. : 6.5
Tolerance mm	: +- 0.05	
No. 1	-	ANITON A SUED
Del. quantity cm3/1000 strokes	: 147.0	CONTROL LEVER
CINCY FOOD SEFORES	I 147.0	control lever
Tolerance	+	position degree : 96.0
cm3/1000 strokes	: +- 1.0 +	tolerance degree : +- 4.0
Check tolerance	I	RATED SPEED
cm3/1000s.	: ← 3.0 ¹	William of Eco
	+	rack travel mm : 10.80
Spreed Tolerance	1	Rated speed rpm : 1160 Tolerance 1/min : +- 5
cm3/1000 strokes	: 4.0	Oterance minimates 5
	+	rack travel mm : 4.00
Check tolerance	: 6.5	Rated speed rpm : 1220 Tolerance 1/min : +- 5
cm3/1000s.	: 6.5	Tolerance 1/min : +- 5
Del. quantity	4	rack travel mm : 0.85
cm3/1000 strokes	: 28.5	Tolerance mm : + 0.55
Tolerance cm3/1000 strokes	: + 2.0	Rated speed rpm : 1350
Check tolerance	1	rack travel mm : 4.00
cm3/1000S.	; 	Rated speed rpm : 1220
Spreed	†	
Tolerance cm3/1000 strokes	: 6.0	
Check tolerance	+	LOW IDLE
cm3/1000S.	: 8.0 +	
	<u> </u>	control lever
(B) SETTING OF IN	JECTION PUMP	position degree : 73.0
WITH GOVERNOR	+	tolerance degree : +- 4.0
	†	Catting paint of aut by man anning
		Setting point w/out bumper spring
GUIDE SLEEVE POSIT	TION +	Rated speed rpm : 450
•	+	rack travel mm : 4.90
governor spring pre—tension	İ	Testing:
click setting x	: 4.50	resemg.
	+	Rated speed rpm : 450
FULL LOAD DELTUED	V AT THE LOAD STOD	rack travel mm : 5.40 Tolerance mm : +- 0.10
FULL LOAD DELIVER	Y AT FULL LOAD STOP	Tolerance mm : + 0.10
Rated speed rpm	: 1100	Rated speed rpm : 100
Aneroid pressure	+	
hPa Del. quantity	: 1300	CRT mm min. : > 19.00
cm3/1000 strokes	: 147.0 I	
Tolerance	+	TORQUE CONTROL
cm3/1000 strokes	: +- 1.0 +	Poted speed now 1400
Check tolerance cm3/1000s.	: + 3.0	Rated speed rpm : 1100 rack travel mm : 11.80
Spreed	+	Tolerance mm : +- 0.05
Tolerance	+	Detail aread non- 1 700
cm3/1000 strokes	: 4.0 +	Rated speed rpm : 700

Tolerance mm		
ANEROID/ALTITUDE COMPENSATOR TEST		
SETTING		
Rated speed rpm Pressure hPa	: 500 : 1300	
MEASUREMENT		
Pressure hPa Rated speed rpm rack travel mm Tolerance mm	: - : 500 : 10.50 : + 0.10	
Rated speed rpm	: 500	
Pressure hPa rack travel mm Tolerance mm	: 1000 : 12.90 : + 0.20	
Pressure hPa		
rack travel mm	: 720 : 11.30 : +- 0.05	
rack travel mm Tolerance mm	: 11.30 : +- 0.05	
rack travel mm Tolerance mm FUEL DELIVERY CHA Aneroid pressure hPa Rated speed rpm	: 11.30 : +- 0.05	
rack travel mm Tolerance mm FUEL DELIVERY CHA Aneroid pressure hPa Rated speed rpm Del. quantity cm3/1000 strokes	: 11.30 : +- 0.05 RACTERISTICS : 1300	
rack travel mm Tolerance mm Tolerance mm FUEL DELIVERY CHA Aneroid pressure hPa Rated speed rpm Del. quantity cm3/1000 strokes Tolerance cm3/1000 strokes	: 11.30 : +- 0.05 RACTERISTICS : 1300 : 700	
rack travel mm Tolerance mm Tolerance mm FUEL DELIVERY CHA Aneroid pressure hPa Rated speed rpm Del. quantity cm3/1000 strokes Tolerance cm3/1000 strokes Check tolerance	: 11.30 : +- 0.05 RACTERISTICS : 1300 : 700 : 193.5	
rack travel mm Tolerance mm Tolerance mm FUEL DELIVERY CHA Aneroid pressure hPa Rated speed rpm Del. quantity cm3/1000 strokes Tolerance cm3/1000 strokes Check tolerance cm3/1000s. Aneroid pressure	: 11.30 : +- 0.05 RACTERISTICS : 1300 : 700 : 193.5 : +- 2.0 : +- 4.0 :	
ressure hra rack travel mm Tolerance mm FUEL DELIVERY CHA Aneroid pressure hPa Rated speed rpm Del. quantity cm3/1000 strokes Tolerance cm3/1000 strokes Check tolerance cm3/1000s. Aneroid pressure hPa Rated speed rpm Del. quantity	: 11.30 : +- 0.05 RACTERISTICS : 1300 : 700 : 193.5 : +- 2.0 : +- 4.0	
rack travel mm Tolerance mm Tolerance mm FUEL DELIVERY CHA Aneroid pressure hPa Rated speed rpm Del. quantity cm3/1000 strokes Tolerance cm3/1000 strokes Check tolerance cm3/1000s. Aneroid pressure hPa Rated speed rpm	: 11.30 : +- 0.05 RACTERISTICS : 1300 : 700 : 193.5 : +- 2.0 : +- 4.0 :	
rack travel mm Tolerance mm Tolerance mm FUEL DELIVERY CHA Aneroid pressure hPa Rated speed rpm Del. quantity cm3/1000 strokes Tolerance cm3/1000s. Aneroid pressure hPa Rated speed rpm Del. quantity cm3/1000 strokes	: 11.30 : +- 0.05 RACTERISTICS : 1300 : 700 : 193.5 : +- 2.0 : +- 4.0 : 500	
rack travel mm Tolerance mm Tolerance mm FUEL DELIVERY CHA Ameroid pressure The Rated speed rpm Del. quantity Cm3/1000 strokes Tolerance Cm3/1000s. Ameroid pressure The Rated speed rpm Del. quantity Cm3/1000 strokes Tolerance Cm3/1000 strokes Tolerance Cm3/1000 strokes Tolerance Cm3/1000 strokes	: +10.05 : +- 0.05 : +- 0.05 : +- 1300 : 700 : 193.5 : +- 2.0 : +- 4.0 : 500 : 123.0	

Rated speed rpm : 1160 Tolerance 1/min : +- 5 STARTING FUEL DELIVERY Rated speed rpm : 100 20.50 rack travel mm : Tolerance mm : **←** 0.50 Del. quantity cm3/1000 strokes : 105.0 Tolerance cm3/1000 strokes : + 20.0 Check tolerance cm3/1000s. : +- 25.0 LOW IDLE Del. quantity cm3/1000 strokes : 28.5 Tolerance cm3/1000 strokes : +- 2.0 Check tolerance cm3/1000s. 4.5 Spreed Tolerance cm3/1000 strokes : 6.0 Check tolerance cm3/1000s. 8.0

End of test specification sheet

Rack travel in mm: 10.80

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

: 20.03.96 Edition : ISO 4113 Test oil

Combination No. : 0 402 736 847

Injection pump

Pump designation : PES6P120A120RS7287 EP type number : 0 412 726 896

Governor

Governer design. : RQV400...1250PA964

: -22K

: 0 421 815 366 Governer no.

Cust. part No. : 3921923

Customer-spec. information Customer : CDC : 6BTA-A Motor Power KW : 156.0

TEST BENCH REQUIREMENTS

Inlet line : 3.2

Test oil inlet

temp. °C 40 Tolerance °C 2.0

Overflow valve : 2 417 413 086

Inlet press. bar : 2.0

Test nozzle holde

: 1 688 901 103 assembly

Opening pressure

208.5 bar Tolerance bar : +- 1.5

: 1 680 750 015 Test lines

Outside diameter : 6.0

x inside diameter: 3.0 x length mm : 600

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant.

per values ____

BEGINNING OF DELIVERY

Test pressure bar : 17.0 Tolerance bar : + 1.0

Prestroke mm 3.60 : +- 0.05 Tolerance mm Check

tolerance mm : + 0.10

Rack travel in mm: 10.50 : +- 1.50 Tolerance mm

: 1-5-3-6-2-Firing order

: 4

: 0-60-120-180-240 Phasing

: -300

Tolerance : +- 0.30

Check

tolerance *NW : +- 0.75

Start of delivery blocking

*NW after s.o.d. : 6.00 Tolerance : +- 0.50

Check

tolerance °NW : + 0.75

Barrel no.

BASIC SETTING

Rated speed rpm : 1150

Rack travel in mm : 14.35 : +- 0.05 Tolerance mm

Del. quantity cm3/1000 strokes	: 177.5	rack travel mm : 13.10 Rated speed rpm : 1315
Tolerance cm3/1000 strokes	: +- 1.0	Tolerance 1/min : + 15
Check tolerance cm3/1000s.	: + 4.0	rack travel mm : 4.00 Rated speed rpm : 1480 Tolerance 1/min : +- 5
Spreed Tolerance cm3/1000 strokes	: 8.0	rack travel mm : 0.50 Tolerance mm : +- 0.50 Rated speed rpm : 1600
Check tolerance cm3/1000s.	: 12.0	
Del. quantity cm3/1000 strokes Tolerance	: 15.0	LOW IDLE control lever
cm3/1000 strokes Check tolerance	·	position degree : 74.0 tolerance degree : + 6.0
cm3/1000S. Spreed Tolerance	: +- 5.0	Testing:
cm3/1000 strokes Check tolerance	<u> </u>	Rated speed rpm : 420 - rack travel mm : 5.80
cm3/1000s.	: 8.0	Tolerance mm : + 0.20 Rated speed rpm : 300
(B) SETTING OF IN	NJECTION PUMP -	- CRT mm min. :> 8.80
	-	Rated speed rpm : 420
	RY AT FULL LOAD STOP	TORQUE CONTROL
Rated speed rpm Ameroid pressure	-	Rated speed rpm : 1150
hPa Del. quantity cm3/1000 strokes	: 1200 - : 177.5	- rack travel mm : 14.35 - Tolerance mm : +- 0.05
Tolerance cm3/1000 strokes Check tolerance	: +- 1.0	- Rated speed rpm : 800 - rack travel mm : 12.60 - Tolerance mm : +- 0.20
cm3/1000S. Spreed Tolerance	: +- 4.0	- - Rated speed rpm : 1250 - rack travel mm : 14.20
cm3/1000 strokes Check tolerance	: 8.0	- Tolerance mm : +- 0.10
cm3/1000s.	: 12.0	- ANEROID/ALTITUDE - COMPENSATOR TEST
CONTROL LEVER		- - SETTING
control lever position degree tolerance degree		- Rated speed rpm : 1150 - Pressure hPa : 1200
RATED SPEED	Ţ	- MEASUREMENT

Pressure hPa Rated speed rpm rack travel mm	: - : 1150 : 10.40 : + 0.20
Tolerance mm Rated speed rpm	: 1150
Pressure hPa rack travel mm Tolerance mm	: 685 : 13.30 : +- 0.30
Pressure hPa rack travel mm Tolerance mm	: 425 : 11.50 : ← 0.20
START CUT-OUT	
Rated speed rpm	: > 100
Rated speed rpm	: < 315
Check speed 1/min	: > 80
Check	
speed 1/min	: < 325
Aneroid pressure hPa Rated speed rpm	: 1200 : 800
Del. quantity cm3/1000 strokes	: 149.5
Tolerance cm3/1000 strokes Check tolerance	: + 3.0
cm3/1000s. Spreed Tolerance	: +- 6.0
cm3/1000 strokes Check tolerance	: 8.0
cm3/1000s.	: 12.0
Aneroid pressure	
hPa Rated speed rpm	1150
Del. quantity cm3/1000 strokes	: 96.5
Tolerance cm3/1000 strokes	: +- 1.0
Check tolerance cm3/1000s.	: + 3.0
BREAKAWAY	

Rated speed rpm : 1315
Tolerance 1/min : +- 15 STARTING FUEL DELIVERY Rated speed rpm rack travel mm : 12.50 : + 0.50 Tolerance mm Del. quantity cm3/1000 strokes : 155.0 Tolerance cm3/1000 strokes : +- 20.0 Check tolerance cm3/1000s. : +- 25.0 LOW IDLE Del. quantity cm3/1000 strokes : 15.0 Tolerance cm3/1000 strokes : +-3.0 Check tolerance cm3/1000s. 5.0 : +--Spreed Tolerance cm3/1000 strokes : 4.0 Check tolerance cm3/1000s. : 8.0

End of test specification sheet

Rack travel in mm: 13.10

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

Edition : 20,03,96 : ISO 4113 Test oil

Combination No. : 0 402 736 848

Injection pump

Pump designation : PES6P120A120RS7314 EP type number : 0 412 726 901

Governor

Governer design. : RQV400...1250PA964

: -23K

: 0 421 815 374 Governer no.

Cust. part No. : 3921922

Customer-spec. information Customer : CDC Motor : 6BTA-A : 142.0 Power KW

TEST BENCH REQUIREMENTS

Inlet line : 3.2

Test oil inlet

temp. °C Tolerance °C : +- 2.0

Overflow valve : 2 417 413 086

Inlet press. bar : 2.0 Tolerance bar : + 0.1

Test nozzle holde

: 1 688 901 103 assembly

Opening pressure

: 208.5 bar : +- 1.5 Tolerance bar

Test lines : 1 680 750 015

Outside diameter : 6.0

x inside diameter: 3.0 x length mm : 600

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant. per values _____

BEGINNING OF DELIVERY

rest pressure bar : 17.0 Tolerance bar : +- 1.0

Prestroke mm : 3.60 Tolerance mm : +- 0.05 Check

tolerance mm : + 0.10

Rack travel in mm : 12.50 Tolerance mm : \leftarrow 0.50

Firing order : 1-5-3-6-2-

: 4

: 0-60-120-180-240 Phasing

: -300 Tolerance : +- 0.30

Check

tolerance °NW : +- 0.75

Start of delivery blocking

*NW after s.o.d. : 5.75 Tolerance : + 0.50

Check

tolerance *NW : +- 0.75

Barrel no. : 1

BASIC SETTING

Rated speed rpm : 1150

Rack travel in mm: 14.35 Tolerance mm : + 0.05

Del. quantity cm3/1000 strokes : 169.5	rack travel mm : 13.00 Rated speed rpm : 1310
Tolerance cm3/1000 strokes : + 1.0	Tolerance 1/min : +- 15
Check tolerance cm3/1000s. : +- 4.0	rack travel mm : 4.00 Rated speed rpm : 1475 Tolerance 1/min : + 5
Spreed Tolerance cm3/1000 strokes : 8.0	rack travel mm : 0.50 Tolerance mm : + 0.50 Rated speed rpm : 1550
Check tolerance cm3/1000s. : 12.0	LOW IDLE
Del. quantity cm3/1000 strokes : 13.0	
Tolerance + 3.0 + Check tolerance + + + + + + + + + + + + + + + + + + +	<pre>control lever position degree : 72.0 tolerance degree : +- 6.0</pre>
cm3/1000s. : + 5.0 + 5.0 Tolerance	Testing:
cm3/1000 strokes : 4.0 + Check tolerance cm3/1000s. : 8.0 + Check tolerance cm3/1000s.	Rated speed rpm : 420 rack travel mm : 6.70 Tolerance mm : +- 0.20
1. 3.3	Rated speed rpm : 300
(B) SETTING OF INJECTION PUMP WITH GOVERNOR	CRT mm min. : > 8.90
	Rated speed rpm : 420
FULL LOAD DELIVERY AT FULL LOAD STOP	TORQUE CONTROL
Rated speed rpm : 1150 Aneroid pressure hPa : 1200	Rated speed rpm : 1150 rack travel mm : 14.35
Del. quantity cm3/1000 strokes : 169.5	Tolerance mm : +- 0.05
Tolerance + 1.0 Check tolerance +	Rated speed rpm : 800 rack travel mm : 12.90 Tolerance mm : + 0.20
cm3/1000s. : + 4.0 +	Rated speed rpm : 1250
Tolerance + cm3/1000 strokes : 8.0 + Check tolerance +	rack travel mm : 14.10 Tolerance mm : +- 0.10
cm3/1000s. : 12.0	ANEROID/ALTITUDE COMPENSATOR TEST
CONTROL LEVER	
control lever position degree : 118.0 tolerance degree : + 6.0	SETTING Rated speed rpm : 1150 Pressure hPa : 1200
DATES COURS	MEASUREMENT
RATED SPEED +) ILAOONEI ILIAI

Pressure hPa Rated speed rpm rack travel mm Tolerance mm	1150 11.50 + 0.20		
Rated speed rpm	: 1150		
Pressure hPa rack travel mm Tolerance mm	: 500 : 13.50 : + 0.30		
Pressure hPa rack travel mm Tolerance mm	: 375 : 12.30 : +- 0.20		
START CUT-OUT			
Rated speed rpm Rated speed rpm	: > 100 : < 315		
Check speed 1/min Check	: > 80		
speed 1/min	: < 325		
FUEL DELIVERY CHARACTERISTICS			
Aneroid pressure hPa Rated speed rpm Del. quantity	: 1200 : 800		
cm3/1000 strokes Tolerance	: 141.0		
cm3/1000 strokes Check tolerance	: +- 3.0		
cm3/1000s. Spreed	: ← 6.0		
Tolerance cm3/1000 strokes Check tolerance	: 8.0		
cm3/1000s.	: 12.0		
Aneroid pressure hPa Rated speed rpm	1150		
Del. quantity cm3/1000 strokes	: 112.5		
Tolerance cm3/1000 strokes	: +- 2.0		
Check tolerance cm3/1000s.	: +- 4.0		
BREAKAWAY			

Rated speed rpm : 1310
Tolerance 1/min : + 15 STARTING FUEL DELIVERY Rated speed rpm : 100 rack travel mm : 14.00 Tolerance mm : + 0.50 Del. quantity cm3/1000 strokes : 155.0 Tolerance cm3/1000 strokes : + 20.0 Check tolerance : +- 25.0 cm3/1000s. LOW IDLE Del. quantity cm3/1000 strokes : 13.0 Tolerance cm3/1000 strokes : +- 3.0 Check tolerance cm3/1000s. : +- 5.0 Spreed Tolerance cm3/1000 strokes : 4.0 Check tolerance cm3/1000s. 8.0

End of test specification sheet

Rack travel in mm: 13.00

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

Edition : 14.03.96 Test oil : ISO 4113

Combination No. : 0 402 736 905

Injection pump

Pump designation : PES6P120A120RS7416 EP type number : 0 412 726 959

Governor

Governer design. : RQV400...1250PA1060

: ~3K

: 0 421 815 513 Governer no.

Cust, part No. : 3928145

Customer-spec. information : CDC Customer : 6BTA-A Motor Power KW : 119.0

TEST BENCH REQUIREMENTS

Inlet line : 3.2

Test oil inlet

temp. °C 40 Tolerance *C 2.0

Overflow valve : 2 417 413 086

Inlet press. bar : 2.0 Tolerance bar : + 0.1

Test nozzle holde

: 1 688 901 103 assembly

Opening pressure

208.5 bar Tolerance bar

Test lines : 1 680 750 015 Outside diameter : 6.0

x inside diameter : 3.0

x length mm : 600

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant.

per values _____

BEGINNING OF DELIVERY

Test pressure bar: Tolerance bar : + 1.0

Prestroke mm 3.60 : +- 0.05 Tolerance mm

Check

: +- 0.10 tolerance mm

Rack travel in mm: 10.50 Tolerance mm : +- 1.50

: 1-5-3-6-2-Firing order

: 0-60-120-180-240 Phasing

: -300

: +- 0.30 Tolerance

Check

tolerance "NW : **←** 0.75

Start of delivery blocking

*NW after s.o.d. : 6.25

: + 0.50Tolerance Check

tolerance *NW : + 0.75

: 1 Barrel no.

BASIC SETTING

Rated speed rpm : 1250

Rack travel in mm: 13.35

Tolerance mm : +- 0.05

Del. quantity cm3/1000 strokes : 15	3.5		
Tolerance		FULL LOAD DELIVER	Y AT FULL LOAD STOP
	1.0	Rated speed rpm Aneroid pressure	: 1250
Check tolerance cm3/1000s. : +	4.0	hPa Del. quantity	: 1200
Spreed		cm3/1000 strokes Tolerance	: 153.5
Tolerance	в.о ‡	cm3/1000 strokes Check tolerance	
Check tolerance cm3/1000s. : 12	2.0	cm3/1000S. Spreed Tolerance	. +- 4.0
Del. quantity	‡	cm3/1000 strokes Check tolerance	
Tolerance	5.5	cm3/1000s.	: 12.0
Check tolerance	3.0	CONTROL LEVED	
Spreed	5.0	CONTROL LEVER	
Tolerance cm3/1000 strokes : 4 Check tolerance	¥.0	position degree tolerance degree	
	3.0	RATED SPEED	
(B) SETTING OF INJECTION F WITH GOVERNOR	PUMP +	rack travel mm Rated speed rpm Tolerance 1/min	
GUIDE SLEEVE TRAVEL	+	rack travel mm	: 4.00
Rated speed rpm : 400 guide sleeve)	Rated speed rpm Tolerance 1/min	: 1475 : + 15
travel mm : 1.	20	rack travel mm Tolerance mm	: 0.50 : + 0.50
Rated speed rpm : 1329 guide sleeve	, ‡	Rated speed rpm	: 1550
travel mm : 7.	83 +	LOW IDLE	
Rated speed rpm : 939	·	control lever	
	18 25	position degree tolerance degree	: 71.0 : + 4.0
Rated speed rpm : 640 guide sleeve	,	Testing:	
travel mm : 3. Tolerance mm : +- 0.	56 25	Rated speed rpm rack travel mm	: 420 : 6.00
Rated speed rpm : 1690 guide sleeve	†	Tolerance mm Rated speed rpm	: +- 0.20 : 400
travel mm : 11. Tolerance mm : + 0.		CRT mm min.	: > 5.80
	+		

Rated speed rpm	: 425	<u> </u>
TORQUE CONTROL		FUEL DELIVERY CHARACTERISTICS
TORROL CONTROL		Aneroid pressure
Rated speed rpm	: 1250	→ hPa : 1200
rack travel mm Tolerance mm	: 13.35	Rated speed rpm : 800
Tolerance mm	: +- 0.05	+ Del quantity
		+ cm3/1000 strokes : 133.0
Rated speed rpm	: 800	+ Tolerance
rack travel mm Tolerance mm	: 12.00	+ cm3/1000 strokes : +- 3.0
Tolerance mm	: +- 0.20	+ Check tolerance
		+ cm3/1000s. : +- 6.0
Rated speed rpm	: 500	+ Spreed
rack travel mm	: 11.60	+ Tolerance
Rated speed rpm rack travel mm Tolerance mm	: +- 0.20	+ cm3/1000 strokes : 8.0
	~ -	+ Check tolerance
Rated speed rpm	: 900	+ cm3/1000s. : 12.0
rack travel mm	: 12.40	
Tolerance mm	: +- 0.20	Aneroid pressure
COLORISO HAIR		+ hPa : -
		Rated speed rpm : 1250
ANEROID/ALTITUDE	•	Del. quantity
COMPENSATOR TEST		+ cm3/1000 strokes : 106.0
COMPENSATOR TEST		Tolerance
		+ cm3/1000 strokes : +- 1.0
CETTALC		
SETTING		+ Check tolerance
	4050	+ cm3/1000s. : + 3.0
Rated speed rpm Pressure hPa	: 1250	†
Pressure hPa	: 1200	
		+ BREAKAWAY
MEASUREMENT		+
		†
Pressure hPa	: -	+ Rack travel in mm : 12.30
Rated speed rpm	: 1250	- Rated speed rpm : 1325
rack travel mm	: 10.40	† Tolerance 1/min : ← 15
rack travel mm Tolerance mm	: +- 0.20	+
		+
Rated speed rpm	: 1250	
·		+ STARTING FUEL DELIVERY
Pressure hPa	: 350	+
rack travel mm	: 12.70	+ Rated speed rpm : 100
Tolerance mm	: +- 0.30	rack travel mm : 13.50
		+ Tolerance mm : + 0.50
Pressure hPa	: 265	- Del. quantity
rack travel mm	: 11.80	+ cm3/1000 strokes : 155.0
Tolerance mm	: +- 0.20	+ Tolerance
TO SET WITH THE	0.20	+ cm3/1000 strokes : +- 20.0
		- Check tolerance
START CUT-OUT		- cm3/1000s. : +- 25.0
DINK! COIOU!		I (1110) 10000 23.0
Dotod amand	: > 100	I
Rated speed rpm		T
Rated speed rpm	: < 280	T
Ola I		LOUTING
Check		+ LOW IDLE
speed 1/min	: > 80	†
Check		+ Del. quantity
speed 1/min	: < 290	+ cm3/1000 strokes : 15.5
		+ Tolerance
		+ cm3/1000 strokes : +- 3.0

Check tolerance cm3/1000s. : +- 5.0 Spreed Tolerance cm3/1000 strokes : 4.0 Check tolerance cm3/1000s. : 8.0

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

Edition : 14.03.96 Test oil : ISO 4113

Combination No. : 9 400 030 736

Injection pump

Pump designation : PES6A95D320/3RS2881

EP type number : 9 410 037 215

Governor

Governer design. :

Governer no. : 9 420 034 715

Cust. part No. : 3929769

Customer-spec. information Customer : CDC Motor : 6BT Power KW : 88.0

TEST BENCH REQUIREMENTS

Inlet line : 3.2

Test oil inlet

temp. °C : 40
Tolerance °C : +- 2.0

Overflow valve : 1 417 413 047

Inlet press. bar : 2.0 Tolerance bar : + 0.1

Test nozzle holde

assembly : 1 688 901 101

Opening pressure

bar : 208.5 Tolerance bar : + 1.5

Test Lines : 1 680 750 014

Outside diameter : 6.0

x inside diameter: 2.0 x length mm : 600

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant.

per values

BEGINNING OF DELIVERY

Test pressure bar : 17.0 Tolerance bar : +- 1.0

Prestroke mm : 2.85
Tolerance mm : + 0.05
Check
tolerance mm : + 0.10

Rack travel in mm : 10.50

Tolerance mm : + 1.50

Firing order : 1-5-3-6-2-

: 4

Phasing : 0-60-120-180-240

: -300

Tolerance : +- 0.50

Check

tolerance °NW : +- 0.75

Start of delivery blocking

*NW after s.o.d. : 7.50 Tolerance : +- 0.50

Check

tolerance °NW : +- 0.75

Barrel no. : 1

BASIC SETTING

Rated speed rpm : 1200

Rack travel in mm: 9.35

Tolerance mm : +- 0.05

Del. quantity cm3/1000 strokes : 75.0 Tolerance	Check tolerance cm3/1000s. : 6.5
cm3/1000 strokes : + 1.0 + Check tolerance	CONTROL LEVER
cm3/1000s. : +- 3.0 +	control lever position degree : 102.5
Spreed Tolerance cm3/1000 strokes : 4.0	tolerance degree : +- 4.0 RATED SPEED
Check tolerance cm3/1000s. : 6.5	rack travel mm : 8.30 Rated speed rpm : 1260 Tolerance 1/min : + 5
Del. quantity cm3/1000 strokes : 18.5 Tolerance	rack travel mm : 4.30 Rated speed rpm : 1315
cm3/1000 strokes : +- 2.0 +- Check tolerance +-	Tolerance 1/min : +- 5
cm3/1000s. : +- 4.5 Spreed Tolerance +-	rack travel mm : 0.85 Tolerance mm : +- 0.55 Rated speed rpm : 1400
cm3/1000 strokes : 6.0 + Check tolerance cm3/1000s. : 8.0 + Check tolerance cm3/1000s.	rack travel mm : 4.30 Rated speed rpm : 1325
(B) SETTING OF INJECTION PUMP	
WITH GOVERNOR	LOW IDLE
GUIDE SLEEVE POSITION	position degree : 88.0 tolerance degree : + 4.0
Rated speed rpm : 800 + Rack travel in mm: 0.50 +	Setting point w/out bumper spring
Tolerance mm : + 0.20	Rated speed rpm : 425 rack travel mm : 4.60
governor spring pre-tension click setting x : 5.00	Testing:
FULL LOAD DELIVERY AT FULL LOAD STOP	Rated speed rpm : 425 rack travel mm : 5.10 Tolerance mm : +- 0.10
Rated speed rpm : 1200	Rated speed rpm : 100
Aneroid pressure hPa : - + Del. quantity	CRT mm min. : > 19.00
cm3/1000 strokes : 75.0 + Tolerance cm3/1000 strokes : +- 1.0 + Tolera	TORQUE CONTROL
Check tolerance +	Data d 1 1200
cm3/1000s. : +- 3.0 +	Rated speed rpm : 1200 rack travel mm : 9.35 Tolerance mm : +- 0.05

BREAKAWAY

Rack travel in mm: 8.30
Rated speed rpm: 1260
Tolerance 1/min: +- 5

STARTING FUEL DELIVERY

Rated speed rpm : 100 rack travel mm : 20.50 Tolerance mm : +- 0.50 Del. quantity cm3/1000 strokes : 120.5 Tolerance

cm3/1000 strokes : +- 10.0 Check tolerance

cm3/1000s. : + 15.0

LOW IDLE

Del. quantity cm3/1000 strokes : 18.5 Tolerance cm3/1000 strokes : +-2.0 Check tolerance cm3/1000s. 4.5 Spreed Tolerance cm3/1000 strokes : 6.0 Check tolerance cm3/1000s. 8.0

Note remarks

Refer to Service Info for test and adjustment instructions.
See microcard(s) W400/...

Edition : 14.03.96 Test oil : ISO 4113

Combination No. : 0 402 678 830

Injection pump

Pump designation : PE8P12OA52O/5RS7386 EP type number : 0 412 628 910

Governor

Governer design. : RSUV325...1150P0A365

Governer no. : 0 421 829 113

Cust. part No. : 12277649KY0120-17

Customer-spec. information

Customer : MWM

Motor : TBD 616 V16

Power KW : 864.0

TEST BENCH REQUIREMENTS

Inlet line : 3.1

Test oil inlet

temp. °C : 40 Tolerance °C : + 2.0

Overflow valve : 1 417 413 025

Inlet press. bar : 1.5
Tolerance bar : + 0.1

Test nozzle holde

assembly : 1 688 901 019

Opening pressure

bar : 208.5 Tolerance bar : + 1.5

Test lines : 1 680 750 075

Outside diameter : 8.0

x inside diameter : 3.0 x length mm : 1000

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant.

per values _____

BEGINNING OF DELIVERY

Test pressure bar : 26.0 Tolerance bar : + 1.0

Prestroke mm : 4.65
Tolerance mm : + 0.05
Check

tolerance mm : \leftarrow 0.10

Rack travel in mm : 13.00
Tolerance mm : + 0.10

Firing order : 1-2-7-8-3-4-

: 5- 6

Phasing : 0-30-45-75-90-120

: -315-345 Tolerance : +- 0.30

Check

tolerance °NW : + 0.50

Start of delivery mark

Barrel no. : 1

BASIC SETTING

Rated speed rpm : 1150

Rack travel in mm : 12.60 Tolerance mm : + 0.05

Del. quantity

cm3/1000 strokes : 262.0

Tolerance

cm3/1000 strokes : + 1.0

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Check tolerance cm3/1000s.	: +- 4.0	+ rack travel mm : 4.00 + Rated speed rpm : 1285
Spreed		+
Tolerance cm3/1000 strokes	: 6.0	LOW IDLE
Check tolerance cm3/1000s.	: 9.0	Setting point w/out bumper spring
Rated speed rpm	: 300	+ Rated speed rpm : 300 + rack travel mm : 5.90
Rack travel in mm	6.40 : +- 0.20	Testing:
Del. quantity cm3/1000 strokes		Rated speed rpm : 300 rack travel mm : 6.40
Tolerance cm3/1000 strokes	: + 3.0	Tolerance mm : +- 0.10
Check tolerance cm3/1000s.	: +- 6.0	TORQUE CONTROL
Spreed Tolerance		† Rated speed rpm : 1150
cm3/1000 strokes	: 8.0	+ rack travel mm : 12.60
Check tolerance cm3/1000s.	: 12.0	Tolerance mm : + 0.05
CIID7 10000.	. 72.0	Rated speed rpm : 800
		rack travel mm : 12.60
(B) SETTING OF IN WITH GOVERNOR	JECTION PUMP	Tolerance mm : + 0.10
		ANEROID/ALTITUDE COMPENSATOR TEST
FULL LOAD DELIVER	Y AT FULL LOAD STOP	<u>†</u>
Rated speed rpm Aneroid pressure		SETTING
hPa	•	Rated speed rpm : 600
Del. quantity	: 262.0	Pressure hPa : 1800 rack travel mm : 12.60
cm3/1000 strokes Tolerance		Tolerance mm : + 0.05
cm3/1000 strokes Check tolerance		MEASUREMENT
cm3/1000S. Spreed	: +- 4.0	Pressure hPa : -
Tolerance		Rated speed rpm : 600
cm3/1000 strokes Check tolerance	: 6.0	+ rack travel mm : 8.50 + Tolerance mm : +- 0.20
cm3/1000s.	: 9.0	+ loterance limit : +- 0.20
		Rated speed rpm : 600
RATED SPEED		Pressure hPa : 1600 rack travel mm : 9.60
rack travel mm	: 11.60	Tolerance mm : + 0.20
Rated speed rpm Tolerance 1/min	: 1193 : +- 5	Pressure hPa : -
roterance r/min	· +- · ·	rack travel mm : 12.45
rack travel mm Tolerance mm Rated speed rpm	: 0.85 : \(\ \ 0.55 : 1380	Tolerance mm : + 0.05

FUEL DELIVERY CHARACTERISTICS

Aneroid pressure
hPa : Rated speed rpm : 800
Del. quantity
cm3/1000 strokes : 261.0
Tolerance

cm3/1000 strokes : +- 3.0
Check tolerance
cm3/1000s. : +- 6.0

Spreed Tolerance cm3/1000 strokes :

cm3/1000 strokes : 8.0
Check tolerance
cm3/1000s. : 12.0

Aneroid pressure
hPa : Rated speed rpm : 500
Del. quantity
cm3/1000 strokes : 131.0

Tolerance cm3/1000 strokes : + 1.0 Check tolerance cm3/1000s. : + 4.0 Spread

Spreed Tolerance cm3/1000 strokes :

Check tolerance cm3/1000s. : 12.0

6.0

BREAKAWAY

Rack travel in mm : 11.60
Rated speed rpm : 1193
Tolerance 1/min : + 5

STARTING FUEL DELIVERY

Rated speed rpm : 100 rack travel mm : > 19.50

LOW IDLE

Rated speed rpm : 300
rack travel mm : 6.40
Tolerance mm : + 0.20
Del. quantity
cm3/1000 strokes : 38.0

Tolerance cm3/1000 strokes : +- 3.0 Check tolerance cm3/1000s. : +- 6.0 Spreed Tolerance cm3/1000 strokes : 8.0 Check tolerance cm3/1000s. : 12.0

Note remarks

Refer to Service Info for test and adjustment instructions.
See microcard(s) W400/...

Edition : 15.03.96 Test oil : ISO 4113

Combination No. : 0 402 746 650

Injection pump

Pump designation : PES6P12OA32ORS7344 EP type number : 0 412 726 914

Governor

Governer design. : RQ275/1050PA999-6 Governer no. : 0 421 801 785

Cust. part No. : CCEP 5151A 66-230

Customer-spec. information

Customer : RVI

Motor : MIDR 062045 M41

Power KW : 250.0

TEST BENCH REQUIREMENTS

Inlet line : 3.1

Test oil inlet

temp. °C : 40
Tolerance °C : + 2.0

Overflow valve : 2 417 413 071

Inlet press. bar : 2.5

Overflow quantity

min. l/h : 145 Tolerance l/h : + 10.0

Test nozzle holde

assembly : 1 688 901 105

Opening pressure

bar : 208.5 Tolerance bar : + 1.5 Test lines : 1 680 750 089

Outside diameter : 8.0

x inside diameter: 3.0

x length mm : 600

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant.

per values _____

BEGINNING OF DELIVERY

Test pressure bar : 26.0 Tolerance bar : + 1.0

Prestroke mm : 4.50 Tolerance mm : +- 0.05

Check

tolerance mm : +- 0.10

Rack travel in mm : 11.00 Tolerance mm : +- 0.50

Firing order : 1-5-3-6-2-

: 4

Phasing : 0-60-120-180-240

: -300

Tolerance : \leftarrow 0.30

Check

tolerance °NW : + 0.50

Start of delivery mark

*NW after s.o.d. : -0.15 Tolerance : + 0.50

Check

tolerance $^{\circ}NW$: \leftarrow 0.75

Barrel no. : 1

Beginning of delivery differende

betw. rack trav.

nm : 21.00

and maximum rack

travel : 11.00 Difference ° CS : 2.25

	+ guide sleeve
BASIC SETTING	travel mm : 6.00
	Rated speed rpm : 416
Rated speed rpm : 600	guide sleeve
Park terrial in the 14 40	† travel mm : 3.44 † Tolerance mm : + 0.10
Rack travel in mm: 11.60 Tolerance mm: + 0.05	+
Del. quantity	Rated speed rpm : 560 guide sleeve
cm3/1000 strokes : 288.0	travel mm : 6.00
Tolerance	Tolerance mm : +- 0.10
cm3/1000 strokes : + 1.0	Rated speed rpm : 1350
Check tolerance	+ guide steeve + travel mm : 11.50
cm3/1000s. : + 4.0	Tolerance mm : + 0.50
Spreed	I
Tolerance cm3/1000 strokes : 5.0	GUIDE SLEEVE POSITION
	Rated speed rpm : 600
Check tolerance cm3/1000s. 9.0	+ Rack travel in mm : 20.00
	Tolerance mm : + 0.80
Rated speed rpm : 275	İ
Rack travel in mm : -7.00	FULL LOAD DELIVERY AT FULL LOAD STOP
Tolerance mm : + 0.20	+ Rated speed rpm : 600
Del. quantity cm3/1000 strokes : 37.0	+ Rated speed rpm : 600 + Aneroid pressure
Tolerance	+ hPa : 1000
cm3/1000 strokes : +- 2.0 Check tolerance	+ Del. quantity + cm3/1000 strokes : 288.0
cm3/1000s. : +- 5.0	Tolerance 200.0
Spreed	cm3/1000 strokes : +- 1.0
Tolerance cm3/1000 strokes : 8.0	+ Check tolerance + cm3/1000s. : +- 4.0
Check tolerance	Spreed 4.0
cm3/1000s. : 12.0	+ Tolerance
	cm3/1000 strokes : 5.0 Check tolerance
(B) SETTING OF INJECTION PUMP	- cm3/1000s. : 9.0
TH GOVERNOR	<u>†</u>
SUIDE SLEEVE TRAVEL	+ CONTROL LEVER
Rated speed rpm : 275	control lever
guide sleeve travel mm : 0.80	+ position degree : 274.0 + tolerance degree : + 4.0
Tolerance mm : + 0.10	+
Rated speed rpm : 1132	RATED SPEED
guide sleeve	rack travel mm : -1.00
travel mm : 6.37	Rated speed rpm : 1135
Tolerance mm : + 0.10	Tolerance 1/min : +- 5
Rated speed rpm : 1050	+ rack travel mm : -7.60

Rated speed rpm Tolerance 1/min rack travel mm Tolerance mm Rated speed rpm	: 1240 : + 15 : -11.10 : + 0.50 : 1350
LOW IDLE	
control lever position degree tolerance degree	
Testing:	
Rated speed rpm rack travel mm Tolerance mm	: 275 : -7.00 : + 0.10
rack travel mm Rated speed rpm Tolerance 1/min	: -9.50 : 365 : + 20
Rated speed rpm	: 200
CRT mm min.	: < -5.80
TORQUE CONTROL	
Rated speed rpm	: 600
Rated speed rpm Tolerance mm	: 1050 : + 0.10
ANEROID/ALTITUDE COMPENSATOR TEST	
SETTING	
Rated speed rpm Pressure hPa	: 500 : 1000
MEASUREMENT	
Pressure hPa Rated speed rpm rack travel mm Tolerance mm	: - : 500 : -3.65 : +- 0.30
Rated speed rpm	: 500
Pressure hPa rack travel mm Tolerance mm	: 560 : -1.25 : + 0.15

Pressure hPa rack travel mm Tolerance mm	: 320 : -2.75 : +- 0.05
START CUT-OUT	
Rated speed rpm Rated speed rpm	: > 100 : < 225
Check speed 1/min Check	: > 80
speed 1/min	: < 245
FUEL DELIVERY CHA	RACTERISTICS
Aneroid pressure	
hPa	: 1000 : 1050
Rated speed rpm Del. quantity	
cm3/1000 strokes Tolerance	: 281.0
cm3/1000 strokes	: + 3.0
Check tolerance cm3/1000s.	: +- 6.0
Aneroid pressure	
Rated speed rpm	500
Del. quantity cm3/1000 strokes	: 114.0
Tolerance	
cm3/1000 strokes Check tolerance	: +- 1.0
cm3/1000s.	: +- 4.0
BREAKAWAY	
Rack travel in mm Rated speed rpm Tolerance 1/min	: -1.00 : 1135 : +- 5
STARTING FUEL DEL	IVERY
Rated speed rpm	: 100
Del. quantity cm3/1000 strokes	: 150.0
Tolerance cm3/1000 strokes	: +- 15.0
Check tolerance	
cm3/1000s.	: +- 19.0

LOW IDLE

Rated speed rpm rack travel mm Tolerance mm	: +-	275 -7.00 0.20	
Del. quantity cm3/1000 strokes	«	37.0	
Tolerance cm3/1000 strokes	. +-	2.0	
Check tolerance	•		
cm3/1000S. Spreed	: +-	5.0	
Tolerance		0.0	
cm3/1000 strokes Check tolerance	:	8.0	
cm3/1000s.	:	12.0	

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

Edition : 19.03.96 Test oil : ISO 4113

Combination No. : 0 403 246 046

Injection pump

Pump designation : PES6MW100/720RS1522

EP type number : 0 413 206 023

Governor

Governer design. : RQV300...1300MW148

: -3

Governer no. : 0 420 083 324

Cust. part No. : 0250744702

Customer—spec. information
Customer : MB-NFZ
Motor : 0M366LA
Power KW : 177.0

TEST BENCH REQUIREMENTS

Inlet line : 3.1

Test oil inlet

temp. °C : 40
Tolerance °C : + 2.0

Overflow valve : 1 419 992 198

Inlet press. bar : 1.5

Test nozzle holde

assembly : 1 688 901 101

Opening pressure

bar : 208.5 Tolerance bar : + 1.5

Test Lines : 1 680 750 089

Outside diameter : 8.0

x inside diameter: 3.0 x length mm : 600

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant.

per values _____

BEGINNING OF DELIVERY

Test pressure bar : 31.0 Tolerance bar : + 1.0

Prestroke mm : 4.55
Tolerance mm : + 0.05

Check

tolerance mm : \leftarrow 0.10

Rack travel in mm : 21.00

Firing order : 1-5-3-6-2-

: 4

Phasing : 0-60-120-180-240

: -300 Tolerance : ← 0.50

Check

tolerance *NW : +- 0.75

BASIC SETTING

Rated speed rpm : 1300

Rack travel in mm : 14.50 Tolerance mm : + 0.05

Del. quantity

cm3/1000 strokes : 133.0

Tolerance

cm3/1000 strokes : + 1.0

Check tolerance

cm3/1000s. : +- 4.0

Spreed

Tolerance

cm3/1000 strokes : 5.0

		+ Tolerance mm : + 0.50
Check tolerance		
cm3/1000S.	: 8.0	
		GUIDE SLEEVE POSITION
Rated speed rpm	: 300	
		Rated speed rpm : 1500
Rack travel in mo	n: 4.50	+
Tolerance mm	: +- 0.20	Rack travel in mm: 10.00
Del. quantity		Tolerance mm : + 2.70
cm3/1000 strokes	: 12.0	
Tolerance		
cm3/1000 strokes	: + 2.0	FULL LOAD DELIVERY AT FULL LOAD STOP
Check tolerance		1022 2010 0221011 11 1022 2010 0101
cm3/1000s.	: +- 4.5	Rated speed rpm : 1300
Spreed	• • • • • • • • • • • • • • • • • • • •	Aneroid pressure
Tolerance		hPa : 1200
cm3/1000 strokes	: 2.0	Del. quantity
Check tolerance	. 2.0	cm3/1000 strokes : 133.0
cm3/1000s.	: 4.0	Tolerance
	• 7.0	- cm3/1000 strokes : +- 1.0
	•	+ Check tolerance
(B) SETTING OF IN	ALECTION DUMP	+ cm3/1000s. : + 4.0
	ADECITOR FOUR	
WITH GOVERNOR	•	+ Spreed - Tolerance
	·	
CUITAGE CUIFEUE TOAL	imi	
GUIDE SLEEVE TRAV	/EL	Check tolerance
maked an end one	. 700	cm3/1000s. : 8.0
Rated speed rpm	: 300	
guide sleeve	0.00	†
travel mm	: 0.92	
Tolerance mm	: + 0.25	CONTROL LEVER
	4 *** *** ***	†
Rated speed rpm	: 1355	control lever
guide sleeve	-	position degree : 120.0
travel mm	: 9.33	tolerance degree : + 4.0
Tolerance mm	: +- 0.25 -	+
	•	RATED SPEED
Rated speed rpm	: 1078 -	
guide sleeve	-	rack travel mm : 13.50
travel mm	: 7.06 -	Rated speed rpm : 1345
Tolerance mm	: +- 0.25 -	Tolerance 1/min : + 5
	-	-
Rated speed rpm	: 514	rack travel mm : 4.00
guide sleeve	-	Rated speed rpm : 1495
travel mm	: 2.14 -	Tolerance 1/min : + 15
Tolerance mm	: - 0.25	
	-	rack travel mm : 0.50
Rated speed rpm	: 564	Tolerance mm : + 0.50
guide sleeve		Rated speed rpm : 1600
travel mm	: 2.60	
Tolerance mm	: ← 0.25	
Rated speed rpm	: 740	LOW IDLE
guide sleeve		
travel mm	: 3.93	
Tolerance mm	÷ + 0.25	control lever
TOTAL BUILD WILL	0.05	position degree : 75.0
Rated speed rpm	: 1720	tolerance degree : +- 4.0
guide sleeve	, ITEU	L
	: 13.50	- Testing:
travel mm	: 13.50	L icacing.

		. .
Rated speed rpm	: 300	
rack travel mm		+ FUEL DELIVERY CHARACTERISTICS
Tolerance mm	: +- 0.10	+
		+ Aneroid pressure
Rated speed rpm	: 200	† hPa : 1200
		Rated speed rpm : 750
CRT mm min.	: > 5.50	+ Del. quantity
		+ cm3/1000 strokes : 128.0
TODALIE AGNITOGI		Tolerance
TORQUE CONTROL		+ cm3/1000 strokes : + 2.0 + Check tolerance
Dated enood nom	: 1300	- cm3/1000s. : +- 5.0
Rated speed rpm rack travel mm		Spreed : +- 3.0
Tolerance mm	: ← 0.05	Tolerance
local direa min		cm3/1000 strokes : 6.0
Rated speed rpm	. 750	Check tolerance
rack travel mm	: 14.50	+ cm3/1000s. : 9.0
Tolerance mm		
		Aneroid pressure
ANEROID/ALTITUDE		Rated speed rpm : 1300
COMPENSATOR TEST		+ Del. quantity
		+ cm3/1000 strokes : 105.0
		† Tolerance
SETTING		+ cm3/1000 strokes : +- 1.5
		+ Check tolerance
Rated speed rpm		+ cm3/1000s. : +- 3.0
Pressure hPa	: 1200	+
rack travel mm	: 14.50	+ Aneroid pressure
Tolerance mm	: +- 0.10	+ hPa : -
		+ Rated speed rpm : 500
MEASUREMENT		+ Del. quantity
		+ cm3/1000 strokes : 46.0
Pressure hPa		+ Tolerance
Rated speed rpm		+ cm3/1000 strokes : + 1.0
Tolerance mm	: ← 0.05	+ Check tolerance
Datad award	: 500	+ cm3/1000s. : + 3.0
Rated speed rpm	: 500	I
Pressure hPa	: 700	## BREAKAWAY
rack travel mm	· 4.80	J. CARAMAT
Tolerance mm	: +- 0.10	1
TWO WITH HAT		Rack travel in mm: 13.50
Pressure hPa	: 300	+ Rated speed rpm : 1345
rack travel mm	: 1.70	+ Tolerance 1/min : +- 5
Tolerance mm	: + 0.10	+
	- · · ·	+
START CUT-OUT		+ STARTING FUEL DELIVERY
B 1 - 1 - 1 - 1 - 1		Patrod arread 100
Rated speed rpm	: > 100	+ Rated speed rpm : 100
Rated speed rpm	: < 200	+ Del. quantity
Chaol		+ cm3/1000 strokes : 160.0
Check	: > 80	Tolerance + cm3/1000 strokes : +- 5.0
speed 1/min Check	: > 80	+ Check tolerance
speed 1/min	: < 220	+ cm3/1000s. :+ 8.0
speed 1/mmi	. \	T (11107 10000). 4 - 0.0
		$oldsymbol{oldsymbol{oldsymbol{oldsymbol{I}}}$
		1

LOW IDLE

Rated speed rpm	:	300	
rack travel mm	•	4.50	
Tolerance mm	: +-	0.20	
Del. quantity			
cm3/1000 strokes	:	12.0	
Tolerance			
cm3/1000 strokes	: +-	2.0	
Check tolerance			
cm3/1000S.	: +-	4.5	
Spreed			
Tolerance			
cm3/1000 strokes	:	2.0	
Check tolerance	·		
cm3/1000s.	:	4.0	
	-		

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

Edition : 19.03.96 : ISO 4113 Test oil

Combination No. : 0 403 466 175

Injection pump

Pump designation : PES6MW100/120RS1240

: 0 413 406 239 EP type number

Governor

Governer design. : RSV400...950MW2A395

Governer no. : 0 420 085 283

Cust. part No. : 3930113

Customer-spec. information

Customer : CDC : 6 CT-830 Motor : 160.0 Power KW

TEST BENCH REQUIREMENTS

Inlet line : 3.1

Test oil inlet

temp. °C 40 Tolerance °C 2.0

: 1 417 413 047 Overflow valve

Inlet press. bar : 1.5

Test nozzle holde

: 1 688 901 101 assembly

Opening pressure

208.5 har Tolerance bar : +- 1.5

Test lines : 1 680 750 014

Outside diameter : 6.0 x inside diameter: 2.0 x length mm 600

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant.

per values _____

BEGINNING OF DELIVERY

Test pressure bar: 31.0 Tolerance bar : +- 1.0

Prestroke mm 3.35 Tolerance mm : +- 0.05

Check

tolerance mm : + 0.10

Rack travel in mm: 10.50 Tolerance mm : + 1.50

: 1-5-3-6-2-Firing order

: 0-60-120-180-240 Phasing

: -300 : +- 0.50

Tolerance Check

tolerance °NW : + 0.75

Start of delivery blocking

"NW after s.o.d. : 8.00

Barrel no. :

BASIC SETTING

950 Rated speed rpm :

12.40 Rack travel in mm : : +- 0.05 Tolerance mm

Del. quantity

cm3/1000 strokes : 146.0

Tolerance

cm3/1000 strokes : +- 1.0

	+ Check tolerance
Check tolerance cm3/1000s. : +- 4.0	cm3/1000s. : 7.5
Spreed	
Tolerance cm3/1000 strokes : 4.0	CONTROL LEVER control lever
Check tolerance	+ position degree : 93.0
cm3/1000s. : 7.5	tolerance degree : + 4.0
Rated speed rpm : 400	RATED SPEED
Rack travel in mm: 5.60	rack travel mm : 11.40
Tolerance mm : +- 0.30	Rated speed rpm : 995
Del. quantity cm3/1000 strokes : 20.0	Tolerance 1/min : +- 5
Tolerance	Track travel mm : 4.00
cm3/1000 strokes : +- 2.0	+ Rated speed rpm : 1040
Check tolerance	+ Tolerance 1/min : + 15
cm3/1000S. : +- 4.5 Spreed	+ rack travel mm : 0.85
Tolerance	+ Tolerance mm : + 0.55
cm3/1000 strokes : 3.5	Rated speed rpm : 1200
Check tolerance	+
cm3/1000s. : 5.5	+ rack travel mm : 4.00 + Rated speed rpm : 1055
	+
(B) SETTING OF INJECTION PUMP	†
WITH GOVERNOR	+
	1 IOW TOLE
	LOW IDLE
GUIDE SLEEVE POSITION	control lever
GUIDE SLEEVE POSITION	}
GUIDE SLEEVE POSITION Rated speed rpm : 800	control lever position degree : 68.0 tolerance degree : + 4.0
GUIDE SLEEVE POSITION Rated speed rpm : 800 Rack travel in mm : 0.65	control lever position degree : 68.0
GUIDE SLEEVE POSITION Rated speed rpm : 800	control lever position degree : 68.0 tolerance degree : + 4.0 Setting point w/out bumper spring
GUIDE SLEEVE POSITION Rated speed rpm : 800 Rack travel in mm : 0.65 Tolerance mm : + 0.35 governor spring	control lever position degree : 68.0 tolerance degree : + 4.0
GUIDE SLEEVE POSITION Rated speed rpm : 800 Rack travel in mm : 0.65 Tolerance mm : + 0.35 governor spring pre-tension	control lever position degree : 68.0 tolerance degree : + 4.0 Setting point w/out bumper spring Rated speed rpm : 400 rack travel mm : 5.10
GUIDE SLEEVE POSITION Rated speed rpm : 800 Rack travel in mm : 0.65 Tolerance mm : + 0.35 governor spring	control lever position degree : 68.0 tolerance degree : + 4.0 Setting point w/out bumper spring Rated speed rpm : 400
GUIDE SLEEVE POSITION Rated speed rpm : 800 Rack travel in mm : 0.65 Tolerance mm : + 0.35 governor spring pre-tension click setting x : 4.00	control lever position degree : 68.0 tolerance degree : + 4.0 Setting point w/out bumper spring Rated speed rpm : 400 rack travel mm : 5.10 Testing: Rated speed rpm : 400
GUIDE SLEEVE POSITION Rated speed rpm : 800 Rack travel in mm : 0.65 Tolerance mm : + 0.35 governor spring pre-tension	control lever position degree : 68.0 tolerance degree : + 4.0 Setting point w/out bumper spring Rated speed rpm : 400 rack travel mm : 5.10 Testing: Rated speed rpm : 400 rack travel mm : 5.60
GUIDE SLEEVE POSITION Rated speed rpm : 800 Rack travel in mm : 0.65 Tolerance mm : + 0.35 governor spring pre-tension click setting x : 4.00 FULL LOAD DELIVERY AT FULL LOAD STOP	control lever position degree : 68.0 tolerance degree : + 4.0 Setting point w/out bumper spring Rated speed rpm : 400 rack travel mm : 5.10 Testing: Rated speed rpm : 400
GUIDE SLEEVE POSITION Rated speed rpm : 800 Rack travel in mm : 0.65 Tolerance mm : + 0.35 governor spring pre-tension click setting x : 4.00 FULL LOAD DELIVERY AT FULL LOAD STOP Rated speed rpm : 950	control lever position degree : 68.0 tolerance degree : + 4.0 Setting point w/out bumper spring Rated speed rpm : 400 rack travel mm : 5.10 Testing: Rated speed rpm : 400 rack travel mm : 5.60 Tolerance mm : + 0.30
GUIDE SLEEVE POSITION Rated speed rpm : 800 Rack travel in mm : 0.65 Tolerance mm : + 0.35 governor spring pre-tension click setting x : 4.00 FULL LOAD DELIVERY AT FULL LOAD STOP	control lever position degree : 68.0 tolerance degree : + 4.0 Setting point w/out bumper spring Rated speed rpm : 400 rack travel mm : 5.10 Testing: Rated speed rpm : 400 rack travel mm : 5.60
GUIDE SLEEVE POSITION Rated speed rpm : 800 Rack travel in mm : 0.65 Tolerance mm : + 0.35 governor spring pre-tension click setting x : 4.00 FULL LOAD DELIVERY AT FULL LOAD STOP Rated speed rpm : 950 Aneroid pressure hPa : 1200 Del. quantity	control lever position degree : 68.0 tolerance degree : + 4.0 Setting point w/out bumper spring Rated speed rpm : 400 rack travel mm : 5.10 Testing: Rated speed rpm : 400 rack travel mm : 5.60 Tolerance mm : + 0.30 rack travel mm : 2.00
GUIDE SLEEVE POSITION Rated speed rpm : 800 Rack travel in mm : 0.65 Tolerance mm : + 0.35 governor spring pre-tension click setting x : 4.00 FULL LOAD DELIVERY AT FULL LOAD STOP Rated speed rpm : 950 Aneroid pressure hPa : 1200 Del. quantity cm3/1000 strokes : 146.0	control lever position degree : 68.0 tolerance degree : + 4.0 Setting point w/out bumper spring Rated speed rpm : 400 rack travel mm : 5.10 Testing: Rated speed rpm : 400 rack travel mm : 5.60 Tolerance mm : + 0.30 rack travel mm : 2.00 Rated speed rpm : 480
GUIDE SLEEVE POSITION Rated speed rpm : 800 Rack travel in mm : 0.65 Tolerance mm : + 0.35 governor spring pre-tension click setting x : 4.00 FULL LOAD DELIVERY AT FULL LOAD STOP Rated speed rpm : 950 Aneroid pressure hPa : 1200 Del. quantity cm3/1000 strokes : 146.0 Tolerance	control lever position degree : 68.0 tolerance degree : + 4.0 Setting point w/out bumper spring Rated speed rpm : 400 rack travel mm : 5.10 Testing: Rated speed rpm : 400 rack travel mm : 5.60 Tolerance mm : + 0.30 rack travel mm : 2.00 Rated speed rpm : 480 Tolerance 1/min : + 30
GUIDE SLEEVE POSITION Rated speed rpm : 800 Rack travel in mm : 0.65 Tolerance mm : + 0.35 governor spring pre-tension click setting x : 4.00 FULL LOAD DELIVERY AT FULL LOAD STOP Rated speed rpm : 950 Aneroid pressure hPa : 1200 Del. quantity cm3/1000 strokes : 146.0 Tolerance cm3/1000 strokes : + 1.0 Check tolerance	control lever position degree : 68.0 tolerance degree : + 4.0 Setting point w/out bumper spring Rated speed rpm : 400 rack travel mm : 5.10 Testing: Rated speed rpm : 400 rack travel mm : 5.60 Tolerance mm : + 0.30 rack travel mm : 2.00 Rated speed rpm : 480 Tolerance 1/min : + 30
GUIDE SLEEVE POSITION Rated speed rpm : 800 Rack travel in mm : 0.65 Tolerance mm : + 0.35 governor spring pre-tension click setting x : 4.00 FULL LOAD DELIVERY AT FULL LOAD STOP Rated speed rpm : 950 Aneroid pressure hPa : 1200 Del. quantity cm3/1000 strokes : 146.0 Tolerance cm3/1000 strokes : + 1.0 Check tolerance cm3/1000s. : + 4.0	control lever position degree : 68.0 tolerance degree : + 4.0 Setting point w/out bumper spring Rated speed rpm : 400 rack travel mm : 5.10 Testing: Rated speed rpm : 400 rack travel mm : 5.60 Tolerance mm : + 0.30 rack travel mm : 2.00 Rated speed rpm : 480 Tolerance 1/min : + 30 TORQUE CONTROL Rated speed rpm : 950
GUIDE SLEEVE POSITION Rated speed rpm : 800 Rack travel in mm : 0.65 Tolerance mm : + 0.35 governor spring pre-tension click setting x : 4.00 FULL LOAD DELIVERY AT FULL LOAD STOP Rated speed rpm : 950 Aneroid pressure hPa : 1200 Del. quantity cm3/1000 strokes : 146.0 Tolerance cm3/1000 strokes : + 1.0 Check tolerance cm3/1000s. : + 4.0 Spreed	control lever position degree : 68.0 tolerance degree : + 4.0 Setting point w/out bumper spring Rated speed rpm : 400 rack travel mm : 5.10 Testing: Rated speed rpm : 400 rack travel mm : 5.60 Tolerance mm : + 0.30 rack travel mm : 2.00 Rated speed rpm : 480 Tolerance 1/min : + 30 TORQUE CONTROL Rated speed rpm : 950 rack travel mm : 12.40
GUIDE SLEEVE POSITION Rated speed rpm : 800 Rack travel in mm : 0.65 Tolerance mm : + 0.35 governor spring pre-tension click setting x : 4.00 FULL LOAD DELIVERY AT FULL LOAD STOP Rated speed rpm : 950 Aneroid pressure hPa : 1200 Del. quantity cm3/1000 strokes : 146.0 Tolerance cm3/1000 strokes : + 1.0 Check tolerance cm3/1000s. : + 4.0	control lever position degree : 68.0 tolerance degree : + 4.0 Setting point w/out bumper spring Rated speed rpm : 400 rack travel mm : 5.10 Testing: Rated speed rpm : 400 rack travel mm : 5.60 Tolerance mm : + 0.30 rack travel mm : 2.00 Rated speed rpm : 480 Tolerance 1/min : + 30 TORQUE CONTROL Rated speed rpm : 950

rack travel mm Tolerance mm	: 12.40 : + 0.10	‡	Check tolerance cm3/1000s.
ANEROID/ALTITUDE COMPENSATOR TEST			BREAKAWAY
SETTING		-	Rack travel in mm Rated speed rpm Tolerance 1/min
Rated speed rpm Pressure hPa rack travel mm Tolerance mm	500 1200 12.40 + 0.10	 	STARTING FUEL DELI
MEASUREMENT		‡	Rated speed rpm
Pressure hPa Rated speed rpm rack travel mm Tolerance mm	500 11.00 + 0.05	†	rack travel mm Tolerance mm Del. quantity cm3/1000 strokes Tolerance cm3/1000 strokes
Rated speed rpm	: 500	Ŧ	Check tolerance
Pressure hPa rack travel mm Tolerance mm	: 750 : 11.90 : + 0.15	++	CIID/ 10003.
Pressure hPa rack travel mm Tolerance mm	: 600 : 11.30 : + 0.10	† + + + +	LOW IDLE Rated speed rpm rack travel mm Tolerance mm Del. quantity
FUEL DELIVERY CHA	ARACTERISTICS	-	cm3/1000 strokes Tolerance
Aneroid pressure hPa Rated speed rpm Del. quantity cm3/1000 strokes Tolerance cm3/1000 strokes Check tolerance	: + 2.0	+++++++++++++++++++++++++++++++++++++++	cm3/1000 strokes Check tolerance cm3/1000s. Spreed Tolerance cm3/1000 strokes Check tolerance cm3/1000s.
cm3/1000s. Spread Tolerance	: +- 5.0	‡	
cm3/1000 strokes Check tolerance cm3/1000s.	: 6.0	‡	End of test specif
Aneroid pressure hPa Rated speed rpm Del. quantity cm3/1000 strokes	: - : 500 : 118.0	† + + + +	
Tolerance cm3/1000 strokes	: +- 1.0	‡	

: +- 4.0 el in mm: 11.40 ed rpm: 995 1/min: + 5 FUEL DELIVERY ed rpm : 100 el mm : 20.00 mm : + 1.00 tity strokes: 145.0 strokes : +- 10.0 erance : +- 13.0 ed rpm : 400 el mm : 5.60 : +- 0.30 mm ity 20.0 strokes : strokes : +- 2.0 erance : +- 4.5 3.5 strokes : rance 5.5 t specification sheet

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

Edition : 22.03.96 Test oil : ISO 4113

Combination No. : 9 400 085 385

Injection pump

Pump designation : PES6A95D410RS2886 EP type number : 9 400 084 039

Governor

Governer design. : RQV300...1300AB1306L

Governer no. : 9 420 080 384

Cust. part No. : 0260745502

Customer-spec. information
Customer : MBB
Motor : OM 366 A
Power KW : 125.0

TEST BENCH REQUIREMENTS

Inlet line : 3.1

Test oil inlet

temp. °C : 40
Tolerance °C : + 2.0

Overflow valve : 1 419 992 198

Inlet press. bar : 1.5

Test nozzle holde

assembly : 0 681 343 009

Opening pressure

bar : 173.5 Tolerance bar : + 1.5

Test Lines : 1 680 750 015

Outside diameter : 6.0

x inside diameter: 3.0 x length mm : 600

REMARKS

(A) INJECTION PUMP SETTING VALUES Set equal delivery quant.

per values ____

BEGINNING OF DELIVERY

Test pressure bar : 26.0 Tolerance bar : + 1.0

Prestroke mm : 3.00
Tolerance mm : + 0.05
Check
tolerance mm : + 0.10

Rack travel in mm : 10.50 Tolerance mm : + 1.50

Firing order : 1-5-3-6-2-

: 4

Phasing : 0-60-120-180-240

: -300

BASIC SETTING

Rated speed rpm : 1300

Rack travel in mm : 10.65 Tolerance mm : + 0.05

Del. quantity

cm3/1000 strokes : 81.0

Tolerance

cm3/1000 strokes : + 1.0

Check tolerance cm3/1000s. : + 3.0

Spreed

Tolerance

cm3/1000 strokes : 3.5

Check tolerance cm3/1000s.

8.0

Del. quantity cm3/1000 strokes : 10.0 Tolerance cm3/1000 strokes : +- 2.0 Check tolerance cm3/1000s. : +- 4.5 Spreed Tolerance cm3/1000 strokes : 5.5 Check tolerance	Spreed Tolerance cm3/1000 strokes : 3.5 Check tolerance cm3/1000s. : 8.0 CONTROL LEVER control lever
cm3/1000s. : 9.0	position degree : 59.0 tolerance degree : +- 4.0
(B) SETTING OF INJECTION PUMP WITH GOVERNOR	control lever position degree : 108.0 tolerance degree : +- 4.0
GUIDE SLEEVE TRAVEL	RATED SPEED
Rated speed rpm : 300 + guide sleeve + travel mm : 1.05 + Tolerance mm : + 0.25	rack travel mm : 9.60 Rated speed rpm : 1355 Tolerance 1/min : +- 5
Rated speed rpm : 1500 guide sleeve travel mm : 8.55	rack travel mm : 4.00 Rated speed rpm : 1480 Tolerance 1/min : +- 15
Tolerance mm : + 0.05 Rated speed rpm : 500 guide sleeve travel mm : 2.55	rack travel mm : 0.50 Tolerance mm : + 0.50 Rated speed rpm : 1600
Tolerance mm : + 0.25	LOW IDLE
Rated speed rpm : 750 guide sleeve	
travel mm : 4.20 + D.10 + D.10	control lever position degree : 70.0 tolerance degree : +- 4.0
GUIDE SLEEVE POSITION	control lever position degree : 22.0
Rated speed rpm : 1500	tolerance degree : +- 4.0
Rack travel in mm: 16.50 + Tolerance mm: + 1.30 +	Testing:
FILL LOAD DELTUEDY AT FILL LOAD STOD	Rated speed rpm : 300 rack travel mm : 8.10 Tolerance mm : + 0.10
FULL LOAD DELIVERY AT FULL LOAD STOP Rated speed rpm : 1300	Rated speed rpm : 100
Aneroid pressure hPa : 900	CRT mm min. : > 9.30
Del. quantity cm3/1000 strokes : 81.0	Rated speed rpm : 375
Tolerance + 1.0 + Check tolerance +	TORQUE CONTROL
cm3/1000s. : + 3.0 +	

Rated speed rpm rack travel mm Tolerance mm Rated speed rpm rack travel mm Tolerance mm Rated speed rpm rack travel mm Tolerance mm Rated speed rpm rack travel mm Tolerance mm Rated speed rpm rack travel mm Tolerance mm	: 10.65 : + 0.05 : 700 : 11.55 : + 0.05 : 800 : 11.35 : + 0.05 : 1030 : 10.85	Del. quantity cm3/1000 strokes : 79.0 Tolerance cm3/1000 strokes : + 2.0 Check tolerance cm3/1000s. : + 4.0 Aneroid pressure hPa : 900 Rated speed rpm : 800 Del. quantity cm3/1000 strokes : 78.0 Tolerance cm3/1000 strokes : + 2.0 Check tolerance cm3/1000s. : + 4.0
ANEROID/ALTITUDE COMPENSATOR TEST		Aneroid pressure hPa : - Rated speed rpm : 500
SETTING		- Del. quantity - cm3/1000 strokes : 50.0 - Tolerance
Rated speed rpm Pressure hPa	: 500 : 900	+ cm3/1000 strokes : +- 1.0 + Check tolerance
rack travel mm Tolerance mm	: 11.55	+ cm3/1000s. : +- 3 ₂ 0
MEASUREMENT		BREAKAWAY
Pressure hPa Rated speed rpm	: - : 500	+ Rack travel in mm : 9.60 + Rated speed rpm : 1355
Rated speed rpm	: 500	Tolerance 1/min : +- 5
Pressure hPa rack travel mm Tolerance mm	: 0.50	STARTING FUEL DELIVERY
Pressure hPa rack travel mm Tolerance mm	: 1.35	Rated speed rpm : 100 rack travel mm : 13.80 Tolerance mm : + 0.10
START CUT-OUT		+ Del. quantity + cm3/1000 strokes : 78.0 + Tolerance
Rated speed rom	: > 100	cm3/1000 strokes : +- 7.5 + Check tolerance
Rated speed rpm	: < 250	+ cm3/1000s. : +- 10.0
Check speed 1/min Check	: > 80	
speed 1/min	: < 260	LOW IDLE
FUEL DELIVERY CHA	RACTERISTICS	+ Del. quantity + cm3/1000 strokes : 10.0 + Tolerance
Aneroid pressure hPa	: 900	cm3/1000 strokes : +- 2.0 Check tolerance
Rated speed rpm	: 700	+ cm3/1000s. : +- 4.5

Spreed

Tolerance cm3/1000 strokes : Check tolerance cm3/1000s.

5.5

9.0

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

Edition : 22.03.96 Test oil : ISO 4113

Combination No. : 9 400 085 388

Injection pump

Pump designation : PES6A95D41DRS2886 EP type number : 9 400 084 039

Governor

Governer design. : RQV300...1300AB1306L

Governer no. : 9 420 080 384

Cust. part No. : 0260746702

Customer-spec. information

Customer : MBB

Motor : OM 366A EURO I

Power KW : 125.0

TEST BENCH REQUIREMENTS

Inlet line : 3.1

Test oil inlet

temp. °C : 40 Tolerance °C : +- 2.0

Overflow valve : 1 419 992 198

Inlet press. bar : 1.5

Test nozzle holde

assembly : 0 681 343 009

Opening pressure

bar : 173.5 Tolerance bar : + 1.5

Test Lines : 1 680 750 015

Outside diameter : 6.0

x inside diameter: 3.0 x length mm : 600

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant.

per values _____

BEGINNING OF DELIVERY

Test pressure bar : 26.0 Tolerance bar : + 1.0

Prestroke mm : 3.00
Tolerance mm : +- 0.05

Check

tolerance mm : + 0.10

Rack travel in mm : 10.50 Tolerance mm : + 1.50

Firing order : 1-5-3-6-2-

: 4

Phasing : 0-60-120-180-240

: -300

3.5

8.0

BASIC SETTING

Rated speed rpm : 1300

Rack travel in mm : 10.65 Tolerance mm : + 0.05

Del. quantity

cm3/1000 strokes : 81.0

Tolerance

cm3/1000 strokes : +- 1.0

Check tolerance

cm3/1000s. : +- 3.0

Spreed

Tolerance

cm3/1000 strokes :

Check tolerance

cm3/1000s. :

	Spreed
Del. quantity cm3/1000 strokes : 10.0	Tolerance cm3/1000 strokes : 3.5
Tolerance + cm3/1000 strokes : + 2.0 +	Check tolerance cm3/1000S. : 8.0
Check tolerance cm3/1000s, : + 4.5	
Spreed	
Tolerance + cm3/1000 strokes : 5.5 +	CONTROL LEVER
Check tolerance	control lever position degree : 59.0
cm3/1000s. : 9.0 +	position degree : 59.0 tolerance degree : +- 4.0
(B) SETTING OF INJECTION PUMP	control lever
WITH GOVERNOR	position degree : 108.0 tolerance degree : + 4.0
	-
GUIDE SLEEVE TRAVEL	RATED SPEED
Rated speed rpm : 300 + guide sleeve +	rack travel mm : 9.60 Rated speed rpm : 1355
travel mm : 1.05	Tolerance 1/min : +- 5
Tolerance mm : +- 0.25	rack travel mm : 4.00
Rated speed rpm : 1500 +	Rated speed rpm : 1480 Tolerance 1/min : +- 15
travel mm : 8.55 +	
Tolerance mm : +- 0.05	rack travel mm : 0.50 Tolerance mm : +- 0.50
Rated speed rpm : 500 + guide sleeve +	Rated speed rpm : 1600
travel mm : 2.55	
Tolerance mm : + 0.25	LOW IDLE
Rated speed rpm : 750 +	
travel mm : 4.20 +	control lever
Tolerance mm : + 0.10	position degree : 70.0 tolerance degree : +- 4.0
GUIDE SLEEVE POSITION	control lever `
+	position degree : 22.0
Rated speed rpm : 1500	tolerance degree : +- 4.0
Rack travel in mm: 16.50 + Tolerance mm: +- 1.30 +	Testing:
+	Rated speed rpm : 300 rack travel mm : 8.10
FULL LOAD DELIVERY AT FULL LOAD STOP	rack travel mm : 8.10 Tolerance mm : +- 0.10
Rated speed rpm : 1300	Rated speed rpm : 100
Aneroid pressure hPa : 900	CRT mm min. : > 9.30
Del. quantity	
cm3/1000 strokes : 81.0	Rated speed rpm : 375
cm3/1000 strokes : + 1.0 +	TORQUE CONTROL
Check tolerance cm3/1000S. : +- 3.0 +	TOWNE CONTROL

Rated speed rpm rack travel mm Tolerance mm	: 10.65	+ Del. quantity + cm3/1000 strokes : 79.0 + Tolerance
Rated speed rom	: 700	+ cm3/1000 strokes : +- 2.0 + Check tolerance
Rated speed rpm rack travel mm Tolerance mm	: 11.55 : +- 0.05	+ cm3/1000s. : +- 4.0
Rated speed rpm	: 800	+ Aneroid pressure + hPa : 900
rack travel mm Tolerance mm	: 11.35	Rated speed rpm : 800
		+ Del. quantity + cm3/1000 strokes : 78.0
Rated speed rpm	: 1030 : 10.85	+ Tolerance + cm3/1000 strokes : +- 2.0
rack travel mm Tolerance mm	: +- 0.05	Check tolerance
		+ cm3/1000s. : +- 4.0
ANEROID/ALTITUDE COMPENSATOR TEST		Aneroid pressure
COM CHONTON 1601		Rated speed rpm : 500
SETTING		+ Del. quantity + cm3/1000 strokes : 50.0
	• 500	Tolerance + cm3/1000 strokes : + 1.0
Rated speed rpm Pressure hPa rack travel mm	900_	Check tolerance
rack travel mm Tolerance mm	: 11.55 : +- 0.05	cm3/1000s. : + 3.0
MEASUREMENT		BREAKAWAY
Pressure hPa Rated speed rpm	: - : 500	+ Rack travel in mm : 9.60
		+ Rated speed rpm : 1355
Rated speed rpm	: 500	† Tolerance 1/min : + 5
Pressure hPa rack travel mm		†
Tolerance mm	: + 0.10	STARTING FUEL DELIVERY
Pressure hPa	: 390	+ Rated speed rpm : 100
rack travel mm	: 1.35	rack travel mm : 13.80
Tolerance mm	: +- 0.05	<pre>† Tolerance mm : ← 0.10 + Del. quantity</pre>
START CUT-OUT		cm3/1000 strokes : 78.0
		+ cm3/1000 strokes : +- 7.5
Rated speed rpm Rated speed rpm	: > 100 : < 250	+ Check tolerance + cm3/1000S. : + 10.0
, ,		+
Check speed 1/min	: > 80	Ţ
Check speed 1/min	: < 260	LOW IDLE
Speca (/mill)		+
FUEL DELIVERY CHA	ARACTERISTICS	+ Del. quantity + cm3/1000 strokes : 10.0
×		+ Tolerance
Ananaid managers		\pm cm ² /1000 etackes \pm 2.0
Aneroid pressure hPa Rated speed rpm	: 900 : 700	+ cm3/1000 strokes : + 2.0 + Check tolerance + cm3/1000s. : + 4.5

Spreed
Tolerance
cm3/1000 strokes :
Check tolerance
cm3/1000s. :

5.5

9.0

BOSCH INJ. PUMP TEST SPECIFICATIONS Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

Edition : 21.03.96 Test oil : ISO 4113

Combination No. : 0 400 876 435

Injection pump

Pump designation : PES6A95D41ORS2864 EP type number : 0 410 896 888

Governor

Governer design. : RSV400...1050A8C2263

: -12L

Governer no. : 0 420 232 636

Cust. part No. : 87 800 971

Customer-spec. information
Customer : NH
Motor : 7.5 L
Power KW : 185.0

TEST BENCH REQUIREMENTS

Inlet line : 1.3

Test oil inlet

temp. °C : 40
Tolerance °C : +- 2.0

Overflow valve : 1 419 992 198

Inlet press. bar : 1.5

Test nozzle holde

assembly : 1 688 901 101

Opening pressure

bar : 208.5 Tolerance bar : + 1.5

Test lines : 1 680 750 008

Outside diameter : 6.0

x inside diameter: 2.0 x length mm : 600

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant. per values _____

BEGINNING OF DELIVERY

Test pressure bar : 26.0 Tolerance bar : + 1.0

Frestroke mm : 2.60
Tolerance mm : + 0.05
Check

tolerance mm : + 0.10

Rack travel in mm : 10.50Tolerance mm : + 1.50

Firing order : 1-5-3-6-2-

: 4

Phasing : 0-60-120-180-240

: -300

BASIC SETTING

Rated speed rpm : 800

Rack travel in mm : 13.45
Tolerance mm : +- 0.10

Del. quantity cm3/1000 strokes : 144.0

Tolerance cm3/1000 strokes : + 1.0

Check tolerance cm3/1000s. : +- 3.0

Spreed Tolerance

cm3/1000 strokes : 3.5

M01

Check tolerance cm3/1000s. : 8.0	‡	Rated speed rpm rack travel mm	
Rated speed rpm : 650 Rack travel in mm : 4.70	+	Rated speed rpm Tolerance 1/min rack travel mm	
Tolerance mm : +- 0.10 Del. quantity	Ŧ	rack travel mm	: 0.85
cm3/1000 strokes : 20.0 Tolerance cm3/1000 strokes : +- 2.0	‡	Tolerance mm Rated speed rpm	: + 0.55 : 1250
Check tolerance cm3/70008. : +- 4.5 Spreed	†	Rated speed rpm rack travel mm	: 1059 : 11.40
Tolerance cm3/1000 strokes : 5.5 Check tolerance	-	Rated speed rpm Tolerance 1/min rack travel mm	
cm3/1000s. : 9.0	Ŧ	rack travel mm	: 0.85
(B) SETTING OF INJECTION PUMP WITH GOVERNOR	+	Tolerance mm Rated speed rpm	: + 0.55 : 1250
	<u>†</u>	Rated speed rpm rack travel mm	
GUIDE SLEEVE POSITION governor spring	+++++++++++++++++++++++++++++++++++++++	Rated speed rpm Tolerance 1/min rack travel mm	: 1093 : + 5 : 4.00
pre-tension click setting x : 3.50	† † †	rack travel mm Tolerance mm Rated speed rpm	: 0.85 : +- 0.55 : 1250
FULL LOAD DELIVERY AT FULL LOAD STOP	‡	Rated speed rpm	
Rated speed rpm : 800 Aneroid pressure	‡	rack travel mm	: 11.40
hPa : 1200 Del. quantity cm3/1000 strokes : 144.0	<u></u>	Rated speed rpm Tolerance 1/min rack travel mm	
Tolerance cm3/1000 strokes : +- 1.0 Check tolerance	†	rack travel mm Tolerance mm	: 0.85 : + 0.55
cm3/1000s. : +- 3.0 Spreed	+	Rated speed rpm	: 1250
Tolerance cm3/1000 strokes : 3.5 Check tolerance	‡	Rated speed rpm rack travel mm	: 1062 : 11.40
cm3/1000s. : 8.0	+++++++++++++++++++++++++++++++++++++++	Rated speed rpm Tolerance 1/min rack travel mm	: 1095 : +- 5 : 4.00
CONTROL LEVER	 	rack travel mm Tolerance mm Rated speed rpm	: 0.85 : + 0.55 : 1250
position degree : 96.0 tolerance degree : +- 4.0	† †	Rated speed rpm rack travel mm	: 1063 : 11.40
ASSEMBLY GOVERNOR SETTING	+	Rated speed rpm Tolerance 1/min	: 1096 : + 5

rack travel mm	: 4.00	+	Tolerance mm	: +- 0.05
rack travel mm Tolerance mm	: 0.85 : +- 0.55	Ī	Rated speed rpm	; 500
Rated speed rpm		 ‡	Pressure hPa rack travel mm Tolerance mm	: 12.30
FOM IDLE		‡	Pressure hPa rack travel mm	: 550 : 10.00
control lever position degree tolerance degree	: 79.0 : + 4.0	+	Tolerance mm	: +- 0.20
Testing:		‡	FUEL DELIVERY CHA	RACTERISTICS
Rated speed rpm rack travel mm Tolerance mm	: 650 : 4.70 : + 0.10	+	Aneroid pressure hPa Rated speed rpm	: -
rack travel mm Rated speed rpm Tolerance 1/min	: 740	 	Del. quantity cm3/1000 strokes Tolerance cm3/1000 strokes	: 70.0
TORQUE CONTROL			Check tolerance cm3/1000s.	
Rated speed rpm rack travel mm Tolerance mm	: 13.45	+++++++++++++++++++++++++++++++++++++++		
Rated speed rpm	: 500	‡	STARTING FUEL DEL	
rack travel mm Tolerance mm	: 13.50 : +- 0.10	‡	Rated speed rpm Del. quantity	
Rated speed rpm rack travel mm		‡	cm3/1000 strokes Tolerance cm3/1000 strokes	
Tolerance mm	: + 0.05	‡	Check tolerance cm3/1000s.	: + 11.0
Rated speed rpm rack travel mm Tolerance mm	: 12.40	† + +		
ANEROID/ALTITUDE			LOW IDLE	
COMPENSATOR TEST		†	Rated speed rpm rack travel mm Tolerance mm	
SETTING		1	Del. quantity cm3/1000 strokes	
Rated speed rpm Pressure hPa rack travel mm	: 500 : 1200 : 13.50	+	Tolerance cm3/1000 strokes Check tolerance	
Tolerance mm	: + 0.10	+	cm3/1000s. Spreed	: +- 4.5
MEASUREMENT		‡	Tolerance cm3/1000 strokes	: 5.5
Pressure hPa Rated speed rpm rack travel mm		‡	Check tolerance cm3/1000s.	: 9.0

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

: 26.03.96 Edition : ISO 4113 Test oil

Combination No. : 0 402 736 834

Injection pump

Pump designation : PES6P120A120RS7265

EP type number : 0 412 726 882

Governor

Governer design. : RQV350...1100PA964

: -12k

Governer no. : 0 421 815 323

Cust. part No. : 3922471

Customer-spec. information Customer : CDC Motor : 6CTA-A : 186.0 Power KW

TEST BENCH REQUIREMENTS

Inlet line : 3.2

Test oil inlet

temp. °C Tolerance °C 2.0

Overflow valve : 2 417 413 086

Inlet press. bar : 2.0 Tolerance bar : +-

Test nozzle holde

: 1 688 901 103 assembly

Opening pressure

: 208.5 bar : +- 1.5 Tolerance bar

Test Lines : 1 680 750 015

Outside diameter : 6.0

x inside diameter : 3.0 x length mm : 600

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant.

per values

BEGINNING OF DELIVERY

Test pressure bar : 17.0 Tolerance bar : + 1.0 Test pressure bar :

Prestroke mm 4.00 Tolerance mm : + 0.05Check

tolerance mm : + 0.10

Rack travel in mm: 10.50 Tolerance mm : + 1.50

: 1-5-3-6-2-Firing order

Phasing : 0-60-120-180-240 : -300

: +- 0.30

Tolerance Check

tolerance "NW : + - 0.75

Start of delivery blocking

*NW after s.o.d. : 5.50 Tolerance : +- 0.50

Check

tolerance *NW : +- 0.75

: 1 Barrel no.

BASIC SETTING

Rated speed rpm : 1100

Rack travel in mm : 13.95 Tolerance mm : + 0.05

Del. quantity	+
cm3/1000 strokes : 211.0	rack travel mm : 12.40
	Rated speed rpm : 1280
Tolerance	+ Tolerance 1/min : + 15
cm3/1000 strokes : +- 1.0	+
Check tolerance	+ Rated speed rpm : 1405
cm3/1000s. : +- 4.0	+ Tolerance 1/min : +- 5
Spreed	+ rack travel mm : 0.50
Tolerance	† Tolerance mm : + 0.50
cm3/1000 strokes : 5.0	+ Rated speed rpm : 1500
Check tolerance	†
cm3/1000s. : 9.0	LOUTING
Only myneshish.	+ LOW IDLE
Del. quantity cm3/1000 strokes : 23.5	†
Tolerance	T control lever
cm3/1000 strokes : +- 3.0	position degree : 70.0
Check tolerance	tolerance degree : + 6.0
cm3/1000s. : + 5.0	T total alive degree . • 0.0
Spreed	+ Testing:
Tolerance	1000111.9
cm3/1000 strokes : 8.0	+ Rated speed rpm : 350
Check tolerance	rack travel mm : 6.80
cm3/1000s. : 12.0	+ Tolerance mm : +- 0.20
	1
	Rated speed rpm : 275
(B) SETTING OF INJECTION PUMP	+
WITH GOVERNOR	+ CRT mm min. : > 8.30
	+
	+ Rated speed rpm : 425
FULL LOAD DELIVERY AT FULL LOAD	
7400	+ TORQUE CONTROL
Rated speed rpm : 1100	Datad aread man
Aneroid pressure	+ Rated speed rpm : 1100
hPa : 1200	+ rack travel mm : 13.95 + Tolerance mm : +- 0.05
Del. quantity cm3/1000 strokes : 211.0	† Tolerance mm : ← 0.05
Tolerance	T Rated speed rpm : 650
cm3/2000 strokes $+ -$	- 1818 (1878) Ann 5 (7.71)
cm3/1000 strokes : + 1.0 Check tolerance	Tolerance mm : + 0.20
Check tolerance	rack travel mm : 12.20 Tolerance mm : + 0.20
Check tolerance cm3/1000s. : + 4.0	+ Tolerance mm : + 0.20
Check tolerance cm3/1000s. : + 4.0 Spreed	Tolerance mm : + 0.20 Rated speed rpm : 1200
Check tolerance cm3/1000s. : + 4.0 Spreed Tolerance	Tolerance mm : + 0.20 Rated speed rpm : 1200
Check tolerance cm3/1000S. : + 4.0 Spreed Tolerance cm3/1000 strokes : 5.0 Check tolerance	Tolerance mm : + 0.20 Rated speed rpm : 1200 rack travel mm : 13.50 Tolerance mm : + 0.10
Check tolerance cm3/1000S. : + 4.0 Spreed Tolerance cm3/1000 strokes : 5.0	Tolerance mm : + 0.20 Rated speed rpm : 1200 rack travel mm : 13.50 Tolerance mm : + 0.10
Check tolerance cm3/1000S. : + 4.0 Spreed Tolerance cm3/1000 strokes : 5.0 Check tolerance	Tolerance mm : + 0.20 Rated speed rpm : 1200 rack travel mm : 13.50 Tolerance mm : + 0.10 Rated speed rpm : 750 rack travel mm : 12.40
Check tolerance cm3/1000S. : + 4.0 Spreed Tolerance cm3/1000 strokes : 5.0 Check tolerance	Tolerance mm : + 0.20 Rated speed rpm : 1200 rack travel mm : 13.50 Tolerance mm : + 0.10
Check tolerance cm3/1000s. : + 4.0 Spreed Tolerance cm3/1000 strokes : 5.0 Check tolerance cm3/1000s. : 9.0	Tolerance mm : + 0.20 Rated speed rpm : 1200 rack travel mm : 13.50 Tolerance mm : + 0.10 Rated speed rpm : 750 rack travel mm : 12.40
Check tolerance cm3/1000S. : + 4.0 Spreed Tolerance cm3/1000 strokes : 5.0 Check tolerance	Tolerance mm : + 0.20 Rated speed rpm : 1200 rack travel mm : 13.50 Tolerance mm : + 0.10 Rated speed rpm : 750 rack travel mm : 12.40 Tolerance mm : + 0.20
Check tolerance cm3/1000s. : + 4.0 Spreed Tolerance cm3/1000 strokes : 5.0 Check tolerance cm3/1000s. : 9.0 CONTROL LEVER	Tolerance mm : + 0.20 Rated speed rpm : 1200 rack travel mm : 13.50 Tolerance mm : + 0.10 Rated speed rpm : 750 rack travel mm : 12.40 Tolerance mm : + 0.20 ANEROID/ALTITUDE
Check tolerance cm3/1000s. : + 4.0 Spreed Tolerance cm3/1000 strokes : 5.0 Check tolerance cm3/1000s. : 9.0 CONTROL LEVER control lever	Tolerance mm : + 0.20 Rated speed rpm : 1200 rack travel mm : 13.50 Tolerance mm : + 0.10 Rated speed rpm : 750 rack travel mm : 12.40 Tolerance mm : + 0.20
Check tolerance cm3/1000s. : + 4.0 Spreed Tolerance cm3/1000 strokes : 5.0 Check tolerance cm3/1000s. : 9.0 CONTROL LEVER control lever position degree : 117.0	Tolerance mm : + 0.20 Rated speed rpm : 1200 rack travel mm : 13.50 Tolerance mm : + 0.10 Rated speed rpm : 750 rack travel mm : 12.40 Tolerance mm : + 0.20 ANEROID/ALTITUDE
Check tolerance cm3/1000s. : + 4.0 Spreed Tolerance cm3/1000 strokes : 5.0 Check tolerance cm3/1000s. : 9.0 CONTROL LEVER control lever	Tolerance mm : + 0.20 Rated speed rpm : 1200 rack travel mm : 13.50 Tolerance mm : + 0.10 Rated speed rpm : 750 rack travel mm : 12.40 Tolerance mm : + 0.20 ANEROID/ALTITUDE COMPENSATOR TEST
Check tolerance cm3/1000s. : + 4.0 Spreed Tolerance cm3/1000 strokes : 5.0 Check tolerance cm3/1000s. : 9.0 CONTROL LEVER control lever position degree : 117.0	Tolerance mm : + 0.20 Rated speed rpm : 1200 rack travel mm : 13.50 Tolerance mm : + 0.10 Rated speed rpm : 750 rack travel mm : 12.40 Tolerance mm : + 0.20 ANEROID/ALTITUDE

M06

Rated speed rpm	: 1100
Pressure hPa	: 1200
MEASUREMENT	
Pressure hPa Rated speed rpm rack travel mm Tolerance mm	: - : 1100 : 8.90 : +- 0.20
Rated speed rpm	: 1100
Pressure hPa rack travel mm Tolerance mm	: 650 : 12.70 : +- 0.20
Pressure hPa rack travel mm Tolerance mm	: 310 : 10.20 : + 0.20
START CUT-OUT	
Rated speed rpm Rated speed rpm	: > 100 : < 290
Check speed 1/min Check	: > 80
speed 1/min	: < 300
FUEL DELIVERY CHA	
	ARACTERISTICS
Aneroid pressure hPa	RACTERISTICS : 1200 : 750
Aneroid pressure	: 1200
Aneroid pressure hPa Rated speed rpm Del. quantity cm3/1000 strokes Tolerance cm3/1000 strokes	: 1200 : 750
Aneroid pressure hPa Rated speed rpm Del. quantity cm3/1000 strokes Tolerance cm3/1000 strokes Check tolerance cm3/1000s. Spreed	: 1200 : 750 : 176.0
Aneroid pressure hPa Rated speed rpm Del. quantity cm3/1000 strokes Tolerance cm3/1000 strokes Check tolerance cm3/1000s. Spreed Tolerance cm3/1000 strokes	: 1200 : 750 : 176.0 : + 3.0
Aneroid pressure hPa Rated speed rpm Del. quantity cm3/1000 strokes Tolerance cm3/1000 strokes Check tolerance cm3/1000s. Spreed Tolerance	: 1200 : 750 : 176.0 : + 3.0 : + 6.0
Aneroid pressure hPa Rated speed rpm Del. quantity cm3/1000 strokes Tolerance cm3/1000s. Spreed Tolerance cm3/1000 strokes Check tolerance cm3/1000 strokes Check tolerance cm3/1000s. Aneroid pressure hPa	: 1200 : 750 : 176.0 : + 3.0 : + 6.0 : 8.0
Aneroid pressure hPa Rated speed rpm Del. quantity cm3/1000 strokes Tolerance cm3/1000s. Spreed Tolerance cm3/1000 strokes Check tolerance cm3/1000 strokes Check tolerance cm3/1000s. Aneroid pressure	: 1200 : 750 : 176.0 : + 3.0 : + 6.0 : 8.0 : 12.0
Aneroid pressure hPa Rated speed rpm Del. quantity cm3/1000 strokes Tolerance cm3/1000s. Spreed Tolerance cm3/1000 strokes Check tolerance cm3/1000 strokes Check tolerance cm3/1000s. Aneroid pressure hPa Rated speed rpm Del. quantity	: 1200 : 750 : 176.0 : + 3.0 : + 6.0 : 8.0 : 12.0 : 1100

BREAKAWAY	
Rack travel in mm Rated speed rpm Tolerance 1/min	: 12.40 : 1280 : +- 15
STARTING FUEL DELI	CVERY
Rated speed rpm rack travel mm Tolerance mm Del. quantity cm3/1000 strokes Tolerance cm3/1000 strokes Check tolerance cm3/1000s.	: 100 : 12.50 : + 0.50 : 200.0 : + 20.0 : + 25.0
LOW IDLE	
Del. quantity cm3/1000 strokes Tolerance	: 23.5
cm3/1000 strokes	: +- 3.0
Check tolerance cm3/1000S. Spreed	: +- 5.0
Tolerance cm3/1000 strokes	: 8.0
Check tolerance cm3/1000s.	: 12.0

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

Edition : 21.03.96 Test oil : ISO 4113

Combination No. : 0 402 736 895

Injection pump

Pump designation : PES6P12OA12ORS7353 EP type number : 0 412 726 924

Governor

Governer design. : RQV350...1100PA1176

: -1K

Governer no. : 0 421 815 496

Cust. part No. : 3930611

Customer-spec. information Customer : CDC Motor : 6CTA-A Power KW : 186.5

TEST BENCH REQUIREMENTS

Inlet line : 3.2

Test oil inlet

temp. °C : 40 Tolerance °C : +- 2.0

Overflow valve : 2 417 413 086

Inlet press. bar : 2.0
Tolerance bar : + 0.1

Test nozzle holde

assembly : 1 688 901 103

Opening pressure

bar : 208.5 Tolerance bar : + 1.5

Test Lines : 1 680 750 015

Outside diameter : 6.0

x inside diameter: 3.0 x length mm : 600

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant.

per values _____

BEGINNING OF DELIVERY

Test pressure bar : 17.0 Tolerance bar : + 1.0

Prestroke mm : 4.00
Tolerance mm : + 0.05
Check

tolerance mm : + 0.10

Rack travel in mm : 10.50 Tolerance mm : + 1.50

Firing order : 1-5-3-6-2-

: 4

Phasing : 0-60-120-180-240

: -300

Tolerance : + 0.30

Check

tolerance °NW : + 0.75

Start of delivery blocking

*NW after s.o.d. : 5.50 Tolerance : + 0.50

Check

tolerance °NW : + 0.75

Barrel no. : 1

BASIC SETTING

Rated speed rpm : 1100

Rack travel in mm : 13.95 Tolerance mm : +- 0.05

Del. quantity cm3/1000 strokes	: 211.0	<u> </u>
		FULL LOAD DELIVERY AT FULL LOAD STOP
Tolerance cm3/1000 strokes	; 1.0	Rated speed rpm : 1100 Aneroid pressure
Check tolerance cm3/1000s.	: +- 4.0	hPa : 1200 + Del. quantity
Spreed		+ cm3/1000 strokes : 211.0 + Tolerance
Tolerance cm3/1000 strokes	: 5.0	cm3/1000 strokes : +- 1.0 Check tolerance cm3/1000s. : +- 4.0
Check tolerance cm3/1000s.	: 9.0	Spreed Tolerance
Del. quantity cm3/1000 strokes	: 23.5	+ cm3/1000 strokes : 5.0 + Check tolerance + cm3/1000s. : 9.0
Tolerance cm3/1000 strokes	: 3.0	‡
Check tolerance cm3/1000s.	: +- 5.0	CONTROL LEVER
Spreed Tolerance		T control lever
cm3/1000 strokes Check tolerance	: 8.0	+ position degree : 118.0 + tolerance degree : + 6.0
cm3/1000s.	: 12.0	RATED SPEED
(B) SETTING OF IN WITH GOVERNOR	JECTION PUMP	rack travel mm : 12.40 Rated speed rpm : 1280 Tolerance 1/min : +- 15
GUIDE SLEEVE TRAV	ÆL	† + rack travel mm : 8.00
Rated speed rpm guide sleeve	: 350	Rated speed rpm : 1345 Tolerance 1/min : + 5
travel mm Tolerance mm	: 2.28 : ← 0.25	rack travel mm : 0.50 Tolerance mm : +- 0.50
Rated speed rpm guide sleeve	: 1282	Rated speed rpm : 1460
travel mm Tolerance mm	: 9.01 : +- 0.25	LOW IDLE
Rated speed rpm guide sleeve	: 452	t control lever
travel mm Tolerance mm	: 3.50 : +- 0.25	position degree : 68.0 tolerance degree : +- 6.0
Rated speed rpm guide sleeve	: 402	Testing:
travel mm Tolerance mm	: 2.91 : +- 0.25	Rated speed rpm : 350 rack travel mm : 6.70
Rated speed rpm	: 1640	Tolerance mm : +- 0.20
guide sleeve travel mm	: 13.50 : +- 0.50	Rated speed rpm : 275 CRT mm min. :> 8.20
Tolerance mm		T CAT IMIT (II (II).

Rated speed rpm	: 425	+
TODOUT CONTROL		FUEL DELIVERY CHARACTERISTICS
TORQUE CONTROL		Aneroid pressure
Rated speed rpm	: 1100	hPa : 1200
rack travel mm		Rated speed rpm : 750
Tolerance mm	; +- 0.05	Del. quantity
		- cm3/1000 strokes : 173.0
Rated speed rpm		+ Tolerance
rack travel mm		+ cm3/1000 strokes : +- 3.0
Tolerance mm	: ← 0.20	+ Check tolerance
	4000	+ cm3/1000s. : +- 6.0
Rated speed rpm	: 1200	Spreed
rack travel mm Tolerance mm	: 13.60	+ Tolerance
rolerance mm	: + 0.10	+ cm3/1000 strokes : 8.0
Rated speed rpm	: 750	+ Check tolerance + cm3/1000s. : 12.0
rack travel mm		I (m5/10003 12.0
Tolerance mm	: +- 0.20	Aneroid pressure
rocer arice inn	0.20	+ hPa : -
		Rated speed rpm : 1100
ANEROID/ALTITUDE		+ Del. quantity
COMPENSATOR TEST		+ cm3/1000 strokes : 92.5
		+ Tolerance
		+ cm3/1000 strokes : +- 1.0
SETTING		+ Check tolerance
		+ cm3/1000s. : +- 4.0
Rated speed rpm		+
Pressure hPa	: 1200	+
		+ BREAKAWAY
MEASUREMENT		†
D		Park travel in ma
Pressure hPa	1400	Rack travel in mm: 12.40
Rated speed rpm rack travel mm		+ Rated speed rpm : 1280 + Tolerance 1/min : + 15
Tolerance mm		Toterance min : +- is
ioterance inii	0.20	I
Rated speed rpm	: 1100	
		+ STARTING FUEL DELIVERY
Pressure hPa	: 650	+
rack travel mm	: 13.00	+ Rated speed rpm : 100
Tolerance mm	: +- 0.20	+ rack travel mm : 11.80
		+ Tolerance mm : +- 0.50
Pressure hPa	: 310	+ Del. quantity
rack travel mm	: 10.70	+ cm3/1000 strokes : 185.0
Tolerance mm	: +- 0.20	+ Tolerance
		+ cm3/1000 strokes : +- 20.0
CTART OUT OUT		
START CUT-OUT		+ cm3/1000s. : +- 25.0
Rated speed rpm	: > 100	I
Rated speed rpm	: < 290	I
nated speed (pill		
Check		+ LOW IDLE
speed 1/min	: > 80	,
Check		→ Del. quantity
speed 1/min	: < 300	+ cm3/1000 strokes : 23.5
• • • • • • • • • • • • • • • • • • • •		+ Tolerance
		+ cm3/1000 strokes : $+$ 3.0

Check tolerance cm3/1000s. : +- 5.0

Spreed

Tolerance
cm3/1000 strokes :
Check tolerance
cm3/1000s. : 8.0

12.0

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

: 22.03.96 Edition Test oil : ISO 4113

Combination No. : 0 402 736 910

Injection pump

Pump designation : PES6P120A720RS7351 EP type number : 0 412 726 922

Governor

Governer design. : RQV450...1100PA1291K

Governer no. : 0 421 815 526

Cust. part No. : 3931948

Customer-spec. information Customer : CDC Motor : 6CTA-A Power KW : 224.0

TEST BENCH REQUIREMENTS

Inlet line : 3.2

Test oil inlet

temp. °C 40 Tolerance °C : + 2.0

Overflow valve : 2 417 413 086

Inlet press. bar : 2.0 Tolerance bar : + 0.1

Test nozzle holde

assembly : 1 688 901 103

Opening pressure

: 208.5 Tolerance bar : +- 1.5

Test Lines : 1 680 750 015

Outside diameter : 6.0

x inside diameter: 3.0 x length mm : 600

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant.

per values _____

BEGINNING OF DELIVERY

Test pressure bar: 17.0 Tolerance bar : + 1.0

Prestroke mm : + 0.05Tolerance mm Check

tolerance mm : + 0.10

Rack travel in mm: 10.50 Tolerance mm : + 1.50

Firing order : 1-5-3-6-2-

: 4

: 0-60-120-180-240 Phasing

: -300 Tolerance : +- 0.30

Check

tolerance "NW : **←** 0.75

Start of delivery blocking

*NW after s.o.d. : 7.00 : +- 0.50 Tolerance

Check

tolerance °NW : +- 0.75

Barrel no. : 1

BASIC SETTING

Rated speed rpm : 1100

Rack travel in mm: 14.75

Tolerance mm : +- 0.05

Del. quantity cm3/1000 strokes : 215.0

M12

	+ D∈	el. quantity	
Tolerance	+ cn	3/1000 strokes :	215.0
cm3/1000 strokes : +-		lerance	
			+- 1.0
Check tolerance		eck tolerance	
cm3/1000s. : +-			+- 4.0
Spreed		reed Lerance	
Tolerance		3/1000 strokes :	5.0
cm3/1000 strokes :		eck tolerance	5.0
the reserve to		3/10008. :	9.0
Check tolerance	-		
cm3/1000s. :	9.0		
	+ -		
Del. quantity		NTROL LEVER	
	27.0		
Tolerance		ntrol lever	144 0
cm3/1000 strokes : +- Check tolerance	· ·	sition degree :	116.0 +- 6.0
cm3/1000s. : +-	5.0	lerance degree :	+ 0.0
Spreed	•	TED SPEED	
Tolerance	1	0, 220	
cm3/1000 strokes :	8.0 + ra	ck travel mm :	13.70
Check tolerance		ted speed rpm :	1165
cm3/1000s. :	12.0 + To	lerance 1/min :	+- 15
	+		
(5) (5)		ck travel mm :	7.80
(B) SETTING OF INJECTION		ted speed rpm :	1250
WITH GOVERNOR	† 10	Lerance 1/min :	+- 5
		ck travel mm .	0.50
GUIDE SLEEVE TRAVEL		ck travel mm :	0.50 +- 0.50
GUIDE SLEEVE TRAVEL	+ То	lerance mm :	+- 0.50
	+ То	lerance mm :	
	† To + Ra	lerance mm :	+- 0.50
Rated speed rpm : 4 guide sleeve travel mm :	1.23 + To	lerance mm : ted speed rpm :	+- 0.50
Rated speed rpm : 4 guide sleeve	1.23 + To	lerance mm :	+- 0.50
Rated speed rpm : 4 guide sleeve travel mm : Tolerance mm : +	1.23 0.20	lerance mm : ted speed rpm :	+- 0.50
Rated speed rpm : 4 guide sleeve travel mm : Tolerance mm : + Rated speed rpm : 11	1.23 - L0 83	lerance mm : ted speed rpm :	+- 0.50
Rated speed rpm : 4 guide sleeve travel mm : Tolerance mm : + Rated speed rpm : 11 guide sleeve	1.23 — — — — — — — — — — — — — — — — — — —	lerance mm : ted speed rpm : W IDLE ntrol lever	+- 0.50 1375
Rated speed rpm : 4 guide sleeve travel mm : + Rated speed rpm : 11 guide sleeve travel mm :	1.23 — — — — — — — — — — — — — — — — — — —	<pre>lerance mm : ted speed rpm : W IDLE ntrol lever sition degree :</pre>	+- 0.50 1375
Rated speed rpm : 4 guide sleeve travel mm : + Rated speed rpm : 11 guide sleeve travel mm :	1.23 — — — — — — — — — — — — — — — — — — —	lerance mm : ted speed rpm : W IDLE ntrol lever	+- 0.50 1375
Rated speed rpm : 4 guide sleeve travel mm : +- Rated speed rpm : 11 guide sleeve travel mm : +- Tolerance mm : +-	1.23 — Col Ra	lerance mm : ted speed rpm : W IDLE ntrol lever sition degree : lerance degree :	+- 0.50 1375
Rated speed rpm : 4 guide sleeve travel mm : +- Rated speed rpm : 11 guide sleeve travel mm : +- Rated speed rpm : 4 Rated speed rpm : 4 Rated speed rpm : 8 guide sleeve	1.23 0.20 + L0 83 7.71 + po 0.15 + to	lerance mm : ted speed rpm : W IDLE ntrol lever sition degree : lerance degree : sting:	+- 0.50 1375 76.0 +- 6.0
Rated speed rpm : 4 guide sleeve travel mm : +- Rated speed rpm : 11 guide sleeve travel mm : +- Rated speed rpm : 4 Rated speed rpm : 4 Rated speed rpm : 8 guide sleeve travel mm : 8	7.71 po 0.15 to 4.59 Ra	lerance mm : ted speed rpm : W IDLE ntrol lever sition degree : lerance degree : sting: ted speed rpm :	+- 0.50 1375 76.0 +- 6.0
Rated speed rpm : 4 guide sleeve travel mm : +- Rated speed rpm : 11 guide sleeve travel mm : +- Rated speed rpm : 4 Rated speed rpm : 4 Rated speed rpm : 8 guide sleeve	1.23 0.20 83 7.71 0.15 1.	lerance mm : ted speed rpm : W IDLE ntrol lever sition degree : lerance degree : sting: ted speed rpm : ck travel mm :	+- 0.50 1375 76.0 +- 6.0 450 6.80
Rated speed rpm : 4 guide sleeve travel mm : + Rated speed rpm : 11 guide sleeve travel mm : + Rated speed rpm : 4 Rated speed rpm : 8 guide sleeve travel mm : + Rated speed rpm : 8 guide sleeve travel mm : + Tolerance mm : +	1.23 0.20 83 7.71 0.15 70 4.59 0.25	lerance mm : ted speed rpm : W IDLE ntrol lever sition degree : lerance degree : sting: ted speed rpm : ck travel mm :	+- 0.50 1375 76.0 +- 6.0
Rated speed rpm : 4 guide sleeve travel mm : Tolerance mm : + Rated speed rpm : 11 guide sleeve travel mm : Tolerance mm : + Rated speed rpm : 8 guide sleeve travel mm : Tolerance mm : + Rated speed rpm : 8 Rated speed rpm : 15	1.23 0.20 83 7.71 0.15 1.23 	lerance mm : ted speed rpm : W IDLE ntrol lever sition degree : lerance degree : sting: ted speed rpm : ck travel mm : lerance mm :	+- 0.50 1375 76.0 +- 6.0 450 6.80 +- 0.20
Rated speed rpm : 4 guide sleeve travel mm : + Rated speed rpm : 11 guide sleeve travel mm : + Rated speed rpm : 8 guide sleeve travel mm : + Rated speed rpm : 8 guide sleeve travel mm : + Rated speed rpm : 15 guide sleeve Rated speed rpm : 15 guide sleeve	1.23 0.20 83 7.71 0.15 1.23 	lerance mm : ted speed rpm : W IDLE ntrol lever sition degree : lerance degree : sting: ted speed rpm : ck travel mm :	+- 0.50 1375 76.0 +- 6.0 450 6.80
Rated speed rpm : 4 guide sleeve travel mm : + Rated speed rpm : 11 guide sleeve travel mm : + Rated speed rpm : 8 guide sleeve travel mm : + Rated speed rpm : 8 guide sleeve travel mm : + Rated speed rpm : 15 guide sleeve travel mm : 15 guide sleeve travel mm : 15	7.71 po. 15 col 7.71 po. 15 col 7.71 po. 15 col 7.71 po. 15 col 7.70 Range 7.	lerance mm : ted speed rpm : W IDLE ntrol lever sition degree : lerance degree : sting: ted speed rpm : ck travel mm : lerance mm : ted speed rpm :	+- 0.50 1375 76.0 +- 6.0 450 6.80 +- 0.20 325
Rated speed rpm : 4 guide sleeve travel mm : + Rated speed rpm : 11 guide sleeve travel mm : + Rated speed rpm : 8 guide sleeve travel mm : + Rated speed rpm : 8 guide sleeve travel mm : + Rated speed rpm : 15 guide sleeve Rated speed rpm : 15 guide sleeve	7.71 po. 15 col 7.71 po. 15 col 7.71 po. 15 col 7.71 po. 15 col 7.70 Range 7.	lerance mm : ted speed rpm : W IDLE ntrol lever sition degree : lerance degree : sting: ted speed rpm : ck travel mm : lerance mm : ted speed rpm :	+- 0.50 1375 76.0 +- 6.0 450 6.80 +- 0.20
Rated speed rpm : 4 guide sleeve travel mm : + Rated speed rpm : 11 guide sleeve travel mm : + Rated speed rpm : 8 guide sleeve travel mm : + Rated speed rpm : 8 guide sleeve travel mm : + Rated speed rpm : 15 guide sleeve travel mm : 15 guide sleeve travel mm : 15	1.23 — — — — — — — — — — — — — — — — — — —	lerance mm : ted speed rpm : W IDLE ntrol lever sition degree : lerance degree : sting: ted speed rpm : ck travel mm : lerance mm : ted speed rpm :	+- 0.50 1375 76.0 +- 6.0 450 6.80 +- 0.20 325 > 8.50
Rated speed rpm : 4 guide sleeve travel mm : + Rated speed rpm : 11 guide sleeve travel mm : + Rated speed rpm : 8 guide sleeve travel mm : + Rated speed rpm : 8 guide sleeve travel mm : + Rated speed rpm : 15 guide sleeve travel mm : 15 guide sleeve travel mm : 15	7.71	lerance mm : ted speed rpm : W IDLE ntrol lever sition degree : lerance degree : sting: ted speed rpm : ck travel mm : lerance mm : ted speed rpm :	+- 0.50 1375 76.0 +- 6.0 450 6.80 +- 0.20 325 > 8.50
Rated speed rpm : 4 guide sleeve travel mm : Tolerance mm : +- Rated speed rpm : 11 guide sleeve travel mm : Tolerance mm : +- Rated speed rpm : 8 guide sleeve travel mm : Tolerance mm : +- Rated speed rpm : 15 guide sleeve travel mm : 15 guide sleeve travel mm : 15 Tolerance mm : +- FULL LOAD DELIVERY AT FUR	1.23 0.20 83 7.71 0.15 70 4.59 0.25 70 Ray To Ray	lerance mm : ted speed rpm : W IDLE ntrol lever sition degree : lerance degree : sting: ted speed rpm : ck travel mm : lerance mm : ted speed rpm : ted speed rpm :	+- 0.50 1375 76.0 +- 6.0 450 6.80 +- 0.20 325 > 8.50
Rated speed rpm : 4 guide sleeve travel mm : Tolerance mm : +- Rated speed rpm : 11 guide sleeve travel mm : Tolerance mm : +- Rated speed rpm : 8 guide sleeve travel mm : Tolerance mm : +- Rated speed rpm : 15 guide sleeve travel mm : 15 guide sleeve travel mm : 15 Guide sleeve travel mm : 15 Guide sleeve travel mm : 15 Guide sleeve travel mm : 15 Guide sleeve travel mm : 15 Guide sleeve travel mm : 15 Guide sleeve travel mm : 15 Guide sleeve travel mm : 15 Guide sleeve travel mm : 15 Guide sleeve travel mm : 15 Guide sleeve travel mm : 15 Guide sleeve travel mm : 15 Guide sleeve travel mm : 15 Guide sleeve travel mm : 15 Guide sleeve	1.23 0.20 83 7.71 0.15 70 4.59 0.25 70 Ray To Ray	lerance mm : ted speed rpm : W IDLE ntrol lever sition degree : lerance degree : sting: ted speed rpm : ck travel mm : lerance mm : ted speed rpm :	+- 0.50 1375 76.0 +- 6.0 450 6.80 +- 0.20 325 > 8.50
Rated speed rpm : 4 guide sleeve travel mm : Tolerance mm : +- Rated speed rpm : 11 guide sleeve travel mm : Tolerance mm : +- Rated speed rpm : 8 guide sleeve travel mm : Tolerance mm : +- Rated speed rpm : 15 guide sleeve travel mm : 15 guide sleeve travel mm : 15 Guide sleeve travel mm : 15 Guide sleeve travel mm : 15 Guide sleeve travel mm : 15 Guide sleeve travel mm : 15 Guide sleeve travel mm : 15 Guide sleeve travel mm : 15 Guide sleeve travel mm : 15 Guide sleeve travel mm : 15 Guide sleeve travel mm : 15 Guide sleeve travel mm : 15 Guide sleeve travel mm : 15 Guide sleeve travel mm : 15 Guide sleeve travel mm : 15 Guide sleeve travel mm : 15 Guide sleeve travel mm : 15 Guide sleeve	1.23 0.20 83 7.71 0.15 670 4.59 0.25 70 Ray 0.25 70 Ray 0.50 CR	lerance mm : ted speed rpm : W IDLE ntrol lever sition degree : lerance degree : sting: ted speed rpm : ck travel mm : lerance mm : ted speed rpm : ted speed rpm : ted speed rpm :	+- 0.50 1375 76.0 +- 6.0 450 6.80 +- 0.20 325 > 8.50 525
Rated speed rpm : 4 guide sleeve travel mm : Tolerance mm : +- Rated speed rpm : 11 guide sleeve travel mm : Tolerance mm : +- Rated speed rpm : 8 guide sleeve travel mm : Tolerance mm : +- Rated speed rpm : 15 guide sleeve travel mm : 15 guide sleeve travel mm : 15 Guide sleeve travel mm : 15 Guide sleeve travel mm : 15 Guide sleeve travel mm : 15 Guide sleeve travel mm : 15 Guide sleeve travel mm : 15 Guide sleeve travel mm : 15 Guide sleeve travel mm : 15 Guide sleeve travel mm : 15 Guide sleeve travel mm : 15 Guide sleeve travel mm : 15 Guide sleeve travel mm : 15 Guide sleeve travel mm : 15 Guide sleeve travel mm : 15 Guide sleeve	1.23 0.20 83 7.71 0.15 670 4.59 0.25 70 Ray 70 Ray 1.00 1.0	lerance mm : ted speed rpm : W IDLE ntrol lever sition degree : lerance degree : sting: ted speed rpm : ck travel mm : lerance mm : ted speed rpm : ted speed rpm :	+- 0.50 1375 76.0 +- 6.0 450 6.80 +- 0.20 325 > 8.50

Tolerance mm	: +- 0.05
Rated speed rpm rack travel mm Tolerance mm	: 800 : 13.80 : ← 0.10
Rated speed rpm rack travel mm Tolerance mm	: 500 : 12.70 : + 0.20
FUEL DELIVERY CHA	RACTERISTICS
Aneroid pressure	
hPa Rated speed rpm	800
Del. quantity cm3/1000 strokes	
Tolerance	
cm3/1000 strokes Check tolerance	
cm3/1000s. Spreed	: + 6.0
Tolerance	. 0.0
cm3/1000 strokes Check tolerance	: 8.0
cm3/1000s.	: 12.0
BREAKAWAY	
Rack travel in mm Rated speed rpm Tolerance 1/min	: 13.70 : 1165 : +- 15
STARTING FUEL DEL	IVERY
Rated speed rpm	: 100
rack travel mm Tolerance mm	: 11.80 : + 0.50
Del. quantity cm3/1000 strokes	: 180.0
Tolerance cm3/1000 strokes	: +- 20.0
Check tolerance	
cm3/1000s.	: +- 25.0
LOW IDLE	
Del. quantity cm3/1000 strokes	: 27.0

Tolerance cm3/1000 strokes : +- 3.0 Check tolerance cm3/1000s. : +- 5.0 Spreed Tolerance cm3/1000 strokes : 8.0 Check tolerance cm3/1000s. : 12.0

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

Edition : 25.03.96 Test oil : ISO 4113

Combination No. : 0 402 776 838

Injection pump

Pump designation : PES6P120A720RS7382 EP type number : 0 412 726 943

Governor

Governer design. : RSV625...1100P0A547

: -14

: 0 421 833 545 Governer no.

Cust. part No. : RE67358

Customer-spec. information Customer : DEERE

: 6081 HZ001 Motor Power KW : 214.0

TEST BENCH REQUIREMENTS

Inlet line : 4.2

Test oil inlet

temp. °C Tolerance °C

Overflow valve : 2 417 413 079

Inlet press. bar : 2.0
Tolerance bar : + 0.1

Test nozzle holde

: 1 688 901 103 assembly

Opening pressure

208.5 bar Tolerance bar : + 1.5

Test Lines : 1 680 750 015

Outside diameter : 6.0

x inside diameter: x length mm : 600

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant.

per values _____

BEGINNING OF DELIVERY

Test pressure bar : 17.0 Tolerance bar : + 1.0

Prestroke mm : 3.60 Tolerance mm : + 0.05 Check

tolerance mm : + 0.10

Rack travel in mm: 10.50 Tolerance mm : + 1.50

: 1-5-3-6-2-Firing order

: 4

Phasing : 0-60-120-180-240

: -300 : +- 0.30

Tolerance

Check

tolerance °NW : + 0.75

Start of delivery mark

*NW after s.o.d. : 9.50 : **←** 0.50 Tolerance

Check

tolerance °NW : + 0.75

: 1 Barrel no.

Beginning of delivery differende

and maximum rack

travel : 14.00 Difference ° CS : 2.50

BASIC SETTING

Rack travel in mm : 11.45 Tolerance mm : + 0.05 Spreed Tolerance cm3/1000 strokes : 196.0 Tolerance cm3/1000 strokes : 196.0 Tolerance cm3/1000 strokes : 1.0 Control Lever position degree : 4.0 Control Lever position degree : + 5.0 Control Lever position degree : + 5.0 Control Lever position degree : + 5.0 Control Lever position degree : + 5.0 Control Lever position degree : + 5.0 Control Lever position degree : + 5.0 Control Lever position degree : + 5.0 Control Lever position degree : + 5.0 Control Lever position degree : + 5.0 Control Lever position degree : + 6.0 Control Lever position degree : + 6.0 Control Lever position degree : + 6.0 Control Lever position degree : + 6.	Rated speed rpm : 1100 +	Tolerance cm3/1000 strokes : +- 1.0
Del. quantity	Rack travel in mm: 11.45	
Del. quantity cm3/1000 strokes : 196.0 Tolerance cm3/1000 strokes : + 1.0 Check tolerance cm3/1000s. : + 4.0 Spreed Tolerance cm3/1000s strokes : 5.0 Check tolerance cm3/1000s strokes : 5.0 Check tolerance cm3/1000s. : 9.0 Del. quantity cm3/1000 strokes : 21.5 Tolerance cm3/1000 strokes : 21.5 Tolerance cm3/1000 strokes : - 3.0 Check tolerance cm3/1000s. : + 5.0 Spreed Tolerance cm3/1000s strokes : - 3.0 Check tolerance cm3/1000s Spreed Tolerance cm3/1000s Spreed Tolerance cm3/1000s Spreed Tolerance cm3/1000s Tole	Tolerance mm : + 0.05 +	
Check tolerance cm3/1000 strokes : 196.0 Check tolerance cm3/1000s. : 9.0	Dol guantity	
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cm3/1000 strokes : + 1.0 Check tolerance cm3/1000s. : + 4.0 CONTROL LEVER Spreed Tolerance cm3/1000 strokes : 5.0 control lever position degree : 97.0 Check tolerance cm3/1000s. : 9.0 RATED SPEED Del. quantity cm3/1000 strokes : 21.5 rack travel mm : 10.40 Rated speed rpm : 1175 Tolerance 1/min : + 5 Check tolerance cm3/1000s. : + 5.0 Rated speed rpm : 1235 rack travel mm : 0.85 Spered Tolerance cm3/1000s. : + 5.0 Cm3/1000 strokes : 8.0 rack travel mm : 0.85 Check tolerance cm3/1000s. : 12.0 Cm3/1000s. : 12.0 Rated speed rpm : 1350 Rated speed rpm : 1235 Rated speed rpm : 250 Rated speed rpm : 4.00 Rated speed rpm : 625 rack travel mm : 4.00 Rated speed rpm : 625 <		
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Rated speed rpm : 1100	FILL LOAD SELTIFON AT FILL LOAD CTOD	rack travel mm : 5.00
Aneroid pressure hPa : 2000 + CRT mm min. : > 19.00 Del. quantity cm3/1000 strokes : 196.0 +	FULL LOAD DELIVERY AT FULL LOAD STOP	Toterance mm : +- U.TU
hPa : 2000 + CRT mm min. : > 19.00 Del. quantity cm3/1000 strokes : 196.0 +	Rated speed rpm : 1100	Rated speed rpm : 100
Del. quantity +	Aneroid pressure	CDT
cm3/1000 strokes : 196.0 +	1	เหม สภาก. : > 79.00
	cm3/1000 strokes : 196.0	
	+	TORQUE CONTROL

Rated speed rpm 1100 11.45 rack travel mm Tolerance mm : +- 0.05 Rated speed rpm 700 13.10 rack travel mm Tolerance mm : + 0.10ANEROID/ALTITUDE COMPENSATOR TEST SETTING Rated speed rpm 500 Pressure hPa 2000 **MEASUREMENT** Pressure hPa Rated speed rpm 500 rack travel mm 9.60 Tolerance mm : +- 0.20 Rated speed rpm 500 Pressure hPa 1350 rack travel mm 12.30 : + 0.20Tolerance mm Pressure hPa 630 rack travel mm 10.50 Tolerance mm : +- 0.05 FUEL DELIVERY CHARACTERISTICS Aneroid pressure 2000 hPa 700 Rated speed rpm Del. quantity cm3/1000 strokes : 262.0 Tolerance 3.0 cm3/1000 strokes Check tolerance cm3/1000s. : +-6.0 Aneroid pressure 700 Rated speed rpm Del. quantity cm3/1000 strokes : 136.5 Tolerance cm3/1000 strokes : +-2.0

4.0

BREAKAWAY Rack travel in mm : 10.40 1175 Rated speed rpm : Tolerance 1/min STARTING FUEL DELIVERY Rated speed rpm 100 20.50 rack travel mm : + 0.50Tolerance mm Del. quantity cm3/1000 strokes : 120.0 Tolerance cm3/1000 strokes : +- 20.0Check tolerance cm3/1000s. : +- 25.0 LOW IDLE Del. quantity cm3/1000 strokes : 21.5 Tolerance cm3/1000 strokes : +-3.0 Check tolerance cm3/1000s. : +--5.0 Spreed Tolerance cm3/1000 strokes : 8.0 Check tolerance cm3/1000s. 12.0

End of test specification sheet

Check tolerance cm3/1000s.

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

Edition : 19.03.96 Test oil : ISO 4113

Combination No. : 0 403 466 161

Injection pump

Pump designation : PES6MW100/120RS1240

EP type number : 0 413 406 239

Governor

Governer design. : RSV500...1100MW2A379

Governer no. : 0 420 085 262

Cust. part No. : 3926882

Customer—spec. information Customer : CDC Motor : 6 CT

Power KW : 161.0

TEST BENCH REQUIREMENTS

Inlet line : 3.2

Test oil inlet

temp. $^{\circ}$ C : 40 Tolerance $^{\circ}$ C : + 2.0

Overflow valve : 1 417 413 047

Inlet press. bar : 2.0 Tolerance bar : + 0.1

Test nozzle holde

assembly : 1 688 901 101

Opening pressure

bar : 208.5 Tolerance bar : + 1.5

Test Lines : 1 680 750 014

Outside diameter : 6.0

x inside diameter: 2.0 x length mm : 600

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant.

per values

BEGINNING OF DELIVERY

Test pressure bar : 17.0 Tolerance bar : + 1.0

Prestroke mm : 3.55
Tolerance mm : + 0.05

Check

tolerance mm : \leftarrow 0.10

Rack travel in mm : 10.50 Tolerance mm : + 1.50

Firing order : 1-5-3-6-2-

: 4

Phasing : 0-60-120-180-240

: -300 : +- 0.30

Tolerance : + 0.30

Check

tolerance °NW : + 0.75

Start of delivery blocking

°NW after s.o.d. : 8.50 Tolerance : + 0.50

Check

tolerance °NW : + 0.75

Barrel no. : 1

Beginning of delivery differende

and maximum rack

travel : 15.00 Difference ° CS : 1.50

BASIC SETTING

Data dana dana dana dana	1 Talamana
Rated speed rpm : 1100	+ Tolerance + cm3/1000 strokes : +- 1.0
	+ Check tolerance
Rack travel in mm : 12.25	+ cm3/1000s. : +- 4.0
Tolerance mm : +- 0.05	+ Spreed
Del. quantity	+ Tolerance + cm3/1000 strokes : 4.0
cm3/1000 strokes : 144.5	+ Check tolerance
	+ cm3/1000s. : 7.5
Tolerance	†
cm3/1000 strokes : + 1.0	†
Check tolerance	CONTROL LEVER
cm3/1000s. : +- 4.0	TOWNS ELVEN
	† control lever
Spreed	position degree : 103.0
Tolerance cm3/1000 strokes : 4.0	tolerance degree : +- 4.0
(III) (DDD 31) OKES . 4.0	RATED SPEED
Check tolerance	+
cm3/1000s. : 7.5	† rack travel mm : 11.20
Dol munostritus	+ Rated speed rpm : 1160 + Tolerance 1/min : +- 5
Del. quantity cm3/1000 strokes : 21.5	+ loterance //min : +- 3
Tolerance	rack travel mm : 5.30
cm3/1000 strokes : +- 2.0	Rated speed rpm : 1230
Check tolerance	Tolerance 1/min : + 5
cm3/1000s. : +- 4.5 Spreed	† + rack travel mm : 1.00
Tolerance -	Tolerance mm : + 0.70
cm3/1000 strokes : 3.5	Rated speed rpm : 1375
Check tolerance	+
cm3/1000s. : 5.5	+ rack travel mm : 5.30 + Rated speed rpm : 1235
	Rated speed rpm : 1235
(B) SETTING OF INJECTION PUMP	[
WITH GOVERNOR -	
•	+ LOW IDLE
	I
GUIDE SLEEVE POSITION	control lever
	position degree : 83.0
Rated speed rpm : 800	tolerance degree : +- 4.0
Rack travel in mm: 0.50	Setting point w/out bumper spring
Tolerance mm : +- 0.20	t
<u>.</u>	Rated speed rpm : 500_
governor spring -	rack travel mm : 4.70
pre-tension - click setting x : 4.75 -	Testing:
	- restrig.
	Rated speed rpm : 500
FULL LOAD DELIVERY AT FULL LOAD STOP	rack travel mm : 5.20
Rated speed rpm : 1100	Tolerance mm : +- 0.10
Rated speed rpm : 1100 - Aneroid pressure	Rated speed rpm : 100
hPa : 1200 -	
Del. quantity	CRT mm min. : > 19.00
cm3/1000 strokes : 144.5	†

TORQUE CONTROL

Rated speed rpm : 1100 rack travel mm : 12.25 Tolerance mm : +- 0.05

Rated speed rpm : 750 rack travel mm : 12.70 Tolerance mm : + 0.10

ANEROID/ALTITUDE COMPENSATOR TEST

SETTING

Rated speed rpm : 500 Pressure hPa : 1200

MEASUREMENT

Pressure hPa : Rated speed rpm : 500
rack travel mm : 10.70
Tolerance mm : + 0.20

Rated speed rpm : 500

Pressure hPa : 790
rack travel mm : 11.90
Tolerance mm : + 0.20

Pressure hPa : 620 rack travel mm : 11.30 Tolerance mm : + 0.20

FUEL DELIVERY CHARACTERISTICS

Aneroid pressure

hPa : 1200 Rated speed rpm : 750 Del. quantity

cm3/1000 strokes : 155.5

Tolerance

cm3/1000 strokes : +- 2.0

Check tolerance

cm3/1000s. : +- 5.0

Spreed Tolerance

cm3/1000 strokes : 6.0 Check tolerance

cm3/1000s. : 9.0

Aneroid pressure

hPa : Rated speed rpm : 500
Del. quantity

cm3/1000 strokes : 119.5

Tolerance

cm3/1000 strokes : + 1.0

Check tolerance

cm3/1000s. : +- 3.0

BREAKAWAY

Rack travel in mm : 11.20
Rated speed rpm : 1160
Tolerance 1/min : +- 5

STARTING FUEL DELIVERY

Rated speed rpm : 100
rack travel mm : 20.50
Tolerance mm : + 1.00
Del. quantity
cm3/1000 strokes : 145.5
Tolerance
cm3/1000 strokes : + 10.0
Check tolerance

: +- 13.0

LOW IDLE

cm3/1000s.

Del. quantity 21.5 cm3/1000 strokes : Tolerance cm3/1000 strokes : +-2.0 Check tolerance cm3/1000s. 4.5 Spreed Tolerance cm3/1000 strokes : 3.5 Check tolerance 5.5 cm3/1000s.

BOSCH INJ. PUMP TEST SPECIFICATIONS Note remarks Refer to Service Info for test and adjustment instructions. See microcard(s) W400/... Edition : 22.03.96 Test oil : ISO 4113 Combination No. : 9 400 030 733 Injection pump Pump designation : PES4A95D320/3RS2880 : 9 410 037 214 EP type number Governor Governer design. : 9 420 034 712 ... Governer no. Cust. part No. : 3930149 Customer-spec. information Customer : CDC : 4BT3.9 Motor Power KW : 78.0 TEST BENCH REQUIREMENTS Inlet line : 3,2 Test oil inlet temp. °C 40 Tolerance °C 2.0 Overflow valve : 1 417 413 047 Inlet press. bar : 0.1 Tolerance bar Test nozzle holde : 1 688 901 101 assembly Opening pressure 208.5 bar : +- 1.5 Tolerance bar Test lines : 1 680 750 014

x inside diameter : 2.0 x length mm : 600
REMARKS
(A) INJECTION PUMP SETTING VALUES Set equal delivery quant. per values
BEGINNING OF DELIVERY
Test pressure bar : 17.0 Tolerance bar : + 1.0
Prestroke mm : 2.45 Tolerance mm : + 0.05 Check
tolerance mm : +- 0.10
Rack travel in mm : 10.50 Tolerance mm : + 1.50
Firing order : 1-3-4-2
Phasing : 0-90-180-270 Tolerance : +- 0.50 Check tolerance *NW : +- 0.75
Fight of delivery blocking
*NW after s.o.d. : 7.50 Tolerance : +- 0.50 Check
tolerance °NW : + 0.75
Barrel no. : 1
BASIC SETTING
Rated speed rpm : 1200
Rack travel in mm: 12.55 Tolerance mm: + 0.05
Del. quantity cm3/1000 strokes : 105.5

Outside diameter :

6.0

Tolerance cm3/1000 strokes : +- 1.0	CONTROL LEVER
Check tolerance cm3/1000s. : +- 3.0	control lever position degree : 103.0
Spreed Tolerance cm3/1000 strokes : 4.0	tolerance degree : +- 4.0 RATED SPEED
Check tolerance cm3/1000s. : 6.5	rack travel mm : 11.50 Rated speed rpm : 1260 Tolerance 1/min : +- 5
Del. quantity cm3/1000 strokes : 20.5 Tolerance	rack travel mm : 5.00 Rated speed rpm : 1340
cm3/1000 strokes : + 2.0 + Check tolerance	Tolerance 1/min : +- 5
cm3/1000s. : +- 4.5 Spreed Tolerance	rack travel mm : 0.85 Tolerance mm : + 0.55 Rated speed rpm : 1400
cm3/1000 strokes : 6.0 + Check tolerance cm3/1000s. : 8.0 + Check tolerance cm3/1000s.	rack travel mm : 5.00 Rated speed rpm : 1340
(B) SETTING OF INJECTION PUMP WITH GOVERNOR	LOW IDLE
GUIDE SLEEVE POSITION	<pre>control lever position degree : 78.0 tolerance degree : +- 4.0</pre>
Rated speed rpm : 800	Setting point w/out bumper spring
Rack travel in mm: 0.50 Tolerance mm: + 0.20	Rated speed rpm : 425 rack travel mm : 5.00
governor spring pre-tension click setting x : 4.00	Testing:
FULL LOAD DELIVERY AT FULL LOAD STOP	Rated speed rpm : 425 rack travel mm : 5.50 Tolerance mm : + 0.10
+	Tolerance mm : +- 0.10 Rated speed rpm : 100
Rated speed rpm : 1200 + Aneroid pressure + hPa : 1000 +	CRT mm min. :> 19.00
Del. quantity cm3/1000 strokes : 105.5	
Tolerance + cm3/1000 strokes : + 1.0 +	TORQUE CONTROL
Check tolerance cm3/1000s. : +- 3.0 +- Spreed	Rated speed rpm : 1200 rack travel mm : 12.55 Tolerance mm : +- 0.05
cm3/1000s. : +- 3.0 +	rack travel mm : 12.55

ANEROID/ALTITUDE COMPENSATOR TEST

SETTING

Rated speed rpm : 500 Pressure hPa : 1000

MEASUREMENT

Pressure hPa : Rated speed rpm : 500
rack travel mm : 10.90
Tolerance mm : +- 0.10

Rated speed rpm : 500

Pressure hPa : 660 rack travel mm : 12.20 Tolerance mm : + 0.20

Pressure hPa : 460 rack travel mm : 11.40 Tolerance mm : + 0.20

FUEL DELIVERY CHARACTERISTICS

Aneroid pressure

Rated speed rpm : 500

Del. quantity

cm3/1000 strokes : 80.5

Tolerance

cm3/1000 strokes : +- 1.0

Check tolerance

cm3/1000s. : \leftarrow 3.0

BREAKAWAY

Rack travel in mm : 11.50
Rated speed rpm : 1260
Tolerance 1/min : + 5

STARTING FUEL DELIVERY

Rated speed rpm : 100 rack travel mm : 20.50 Tolerance mm : + 0.50

Del. quantity

cm3/1000 strokes : 120.0

Tolerance

cm3/1000 strokes : +- 10.0

Check tolerance

cm3/1000s. : +- 15.0

LOW IDLE

Del. quantity cm3/1000 strokes : 20.5 Tolerance cm3/1000 strokes : +- 2.0

Check tolerance

cm3/1000s. : +- 4.5

Tolerance

cm3/1000 strokes : 6.0

Check tolerance cm3/1000s.

8.0

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

Edition : 05,03,96 : ISO 4113 Test oil

Combination No. : 9 400 030 740

Injection pump

Pump designation : PES6A95D320/3RS2881

EP type number : 9 410 037 215

Governor

Governer design. :

: 9 420 034 719 Governer no.

Cust. part No. : 3929410

Customer-spec. information Customer : CDC Motor : 6BT

Power KW : 100.0

TEST BENCH REQUIREMENTS

Inlet line : 3.2

Test oil inlet

temp. °C Tolerance °C : +- 2.0

Overflow valve : 1 417 413 047

Inlet press. bar : Tolerance bar : +- 0.1

Test nozzle holde

: 1 688 901 101 assembly

Opening pressure

208.5 bar : +- 1.5 Tolerance bar

Test lines : 1 680 750 014

Outside diameter : 6.0

x inside diameter: 2.0 x length mm : 600

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant.

per values

BEGINNING OF DELIVERY

Test pressure bar : 17.0 Tolerance bar : +- 1.0

Prestroke mm : 2.85
Tolerance mm : + 0.05 Check

tolerance mm : \leftarrow 0.10

Rack travel in mm : 10.50 Tolerance mm : \leftarrow 1.50

Firing order : 1-5-3-6-2-

: 4

Phasing : 0-60-120-180-240

: -300

: ← 0.50 Tolerance

Check

: +- 0.75 tolerance "NW

Start of delivery blocking

*NW after s.o.d. : 7.50 Tolerance : + 0.50

Check

tolerance *NW : + 0.75

Barrel no. : 1

BASIC SETTING

Rated speed rpm : 1200

Rack travel in mm: 10.85 Tolerance mm : +- 0.05

Del. quantity cm3/1000 strokes : 90.0	Check tolerance cm3/1000s. : 6.5
Tolerance cm3/1000 strokes : + 1.0	CONTROL LEVER
Check tolerance cm3/1000s. : + 3.0	control lever position degree : 103.0
Spreed Tolerance cm3/1000 strokes : 4.0	RATED SPEED rack travel mm : 9.85
Check tolerance cm3/1000s. : 6.5	Rated speed rpm : 1250 Tolerance 1/min : +- 5
Del. quantity cm3/1000 strokes : 18.5 Tolerance cm3/1000 strokes : +- 2.0	rack travel mm : 4.50 Rated speed rpm : 1305 Tolerance 1/min : +- 5
Check tolerance cm3/1000s. : + 4.5 Spreed Tolerance	rack travel mm : 0.85 Tolerance mm : +- 0.55 Rated speed rpm : 1400
cm3/1000 strokes : 6.0 + Check tolerance +	
cm3/1000s. : 8.0	LOW IDLE
(B) SETTING OF INJECTION PUMP WITH GOVERNOR	control lever position degree : 86.0
	Setting point w/out bumper spring
GUIDE SLEEVE POSITION	Rated speed rpm : 425 rack travel mm : 4.60
Rated speed rpm : 800 + Rack travel in mm : 0.50 +	Testing:
Tolerance mm : + 0.20 + governor spring +	Rated speed rpm : 425 rack travel mm : 5.10 Tolerance mm : + 0.10
pre-tension + click setting x : 5.00 +	Rated speed rpm : 100
FULL LOAD DELIVERY AT FULL LOAD STOP	CRT mm min. : > 19.00
Rated speed rpm : 1200	TORQUE CONTROL
Aneroid pressure hPa : 900 + Del. quantity +	Rated speed rpm : 1200 rack travel mm : 10.85
cm3/1000 strokes : 90.0	rack travel mm : 10.85 Tolerance mm : + 0.05
cm3/1000 strokes : +- 1.0 +	ANEROID/ALTITUDE
cm3/1000s. : +- 3.0 +	COMPENSATOR TEST
Tolerance + cm3/1000 strokes : 4.0 +	SETTING

Rated speed rpm	:	800
Pressure hPa	:	900

MEASUREMENT

Pressure hPa	:	-
Rated speed rpm	:	800
rack travel mm	:	8.70
Tolerance mm	: +	- 0.20

Rated speed rpm : 800

Pressure hPa : 450 rack travel mm : 10.50 Tolerance mm : +- 0.20

Pressure hPa : 275
rack travel mm : 9.50
Tolerance mm : +- 0.20

FUEL DELIVERY CHARACTERISTICS

Aneroid pressure

hPa : Rated speed rpm : 800
Del. quantity
cm3/1000 strokes : 65.5

Tolerance

cm3/1000 strokes : +- 1.0

Check tolerance

cm3/1000s. : +- 3.0

BREAKAWAY

Rack travel in mm: 9.85
Rated speed rpm: 1250
Tolerance 1/min: + 5

STARTING FUEL DELIVERY

Rated speed rpm : 100
rack travel mm : 20.50
Tolerance mm : + 0.50
Del. quantity
cm3/1000 strokes : 120.5
Tolerance
cm3/1000 strokes : + 10.0
Check tolerance
cm3/1000s. : + 15.0

LOW IDLE

Del. quantity cm3/1000 strokes Tolerance	:	18.5	
cm3/1000 strokes	: +-	2.0	
Check tolerance cm3/1000s. Spreed	: +-	4.5	
Tolerance cm3/1000 strokes Check tolerance	:	6.0	
cm3/1000s.	•	8.0	

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

Edition : 21.03.96 Test oil : ISO 4113

Combination No. : 0 401 848 830

Injection pump

Pump designation : PE8P110A320LS3865 EP type number : 0 411 818 728

Governor

Governer design. : RQV250...1000PA1286 Governer no. : 0 421 814 175

Cust. part No. :

Customer—spec. information Customer : DHI Motor : V2-8TC

TEST BENCH REQUIREMENTS

Inlet line : 3.1

Test oil inlet

temp. °C : 40
Tolerance °C : + 2.0

Overflow valve : 1 417 413 025

Inlet press. bar : 1.5
Tolerance bar : + 0.1

Test nozzle holde

assembly : 1 688 901 101

Opening pressure

bar : 208.5 Tolerance bar : + 1.5

Test lines : 1 680 750 008

Outside diameter : 6.0

x inside diameter: 2.0 x length mm : 600

REMARKS

(A) INJECTION PUMP SETTING VALUES Set equal delivery quant.

per values _____

BEGINNING OF DELIVERY

Test pressure bar : 26.0 Tolerance bar : + 1.0

Prestroke mm : 4.00
Tolerance mm : + 0.05
Check
tolerance mm : + 0.10

Rack travel in mm : 10.50 Tolerance mm : + 1.50

Firing order : 8-7-2-6-3 :-5-4-1

Phasing : 0-45-90-135-180 : -225-270-315

Tolerance : + 0.30

Check

tolerance °NW : +- 0.50

Start of delivery mark

Tolerance : + 0.50 Check tolerance °NW : + 0.75

Barrel no. : 8

BASIC SETTING

Rated speed rpm : 1000

Rack travel in mm : 13.00 Tolerance mm : + 0.05

Del. quantity cm3/1000 strokes : 142.0

Tolerance + 1.0 +	
**************************************	GUIDE SLEEVE POSITION
Check tolerance cm3/1000s. : +- 4.0	Rated speed rpm : 1120
Spreed Tolerance cm3/1000 strokes : 6.0	Rack travel in mm: 12.00 Tolerance mm: + 1.30
Check tolerance cm3/1000s. : 10.0	FULL LOAD DELIVERY AT FULL LOAD STOP
Rated speed rpm : 250	Rated speed rpm : 1000 Aneroid pressure hPa : -
Rack travel in mm: 8.10 Tolerance mm: + 0.30	Del. quantity cm3/1000 strokes : 142.0
Del. quantity + cm3/1000 strokes : 25.0 + Tolerance + Tolerance	Tolerance cm3/1000 strokes : + 1.0 Check tolerance
cm3/1000 strokes : + 3.0 + Check tolerance	cm3/1000S. : +- 4.0 Spreed
cm3/1000S. : + 6.0 + Spreed + Tolerance	Tolerance cm3/1000 strokes : 6.0 Check tolerance
cm3/1000 strokes : 6.0	cm3/1000s. : 10.0
cm3/1000s. : 10.0	
(B) SETTING OF INJECTION PUMP WITH GOVERNOR	control lever position degree : 65.0 tolerance degree : + 4.0
GUIDE SLEEVE TRAVEL	toterante degree : +- 4.0
Rated speed rpm : 250 guide sleeve travel mm : 1.31	control lever position degree : 120.0 tolerance degree : + 4.0
Tolerance mm : + 0.20	RATED SPEED
Rated speed rpm : 1058 guide sleeve travel mm : 8.56	rack travel mm : 12.00 Rated speed rpm : 1045 Tolerance 1/min : +- 5
Tolerance mm : + 0.15	rack travel mm : 4.00 Rated speed rpm : 1155
Rated speed rpm : 666 + guide sleeve + travel mm : 5.29	Tolerance 1/min : + 15
Tolerance mm : + 0.25	rack travel mm : 0.50 Tolerance mm : + 0.50
Rated speed rpm : 380 + guide sleeve + trayel mm : 3.20 +	Rated speed rpm : 1300
Tolerance mm : + 0.25	LOW IDLE
Rated speed rpm : 1300 + guide sleeve	COM INCE
travel mm : 11.50 + Tolerance mm : + 0.50 +	control lever position degree : 71.0

Rack travel in mm Rated speed rpm	
BREAKAWAY	
cm3/1000s.	: +- 6.0
cm3/1000 strokes Check tolerance	: +- 3.0
cm3/1000 strokes Tolerance	: 145.0
Rated speed rpm Del. quantity	
Aneroid pressure	: - : 650
FUEL DELIVERY CHAP	RACTERISTICS
heck peed 1/min	: < 210
Check speed 1/min	: > 80
Rated speed rpm Rated speed rpm	: > 100 : < 190
START CUT-OUT	
Tolerance mm	: +- 0.10
Rated speed rpm rack travel mm	: 650 : 13.00
rack travel mm Folerance mm	
Rated speed rpm	
FORQUE CONTROL	
Rated speed rpm	: 400
CRT mm min.	: > 9.50
Rated speed rpm	: 150
Rated speed rpm rack travel mm Tolerance mm	: 250 : 8.10 : + 0.10
Testing:	
control lever position degree tolerance degree	: 16.0 : +- 4.0
tolerance degree	: ← 4.0

Tolerance 1/min	; +- 5
STARTING FUEL DEL	.IVERY
Rated speed rpm Del. quantity	: 100
cm3/1000 strokes Tolerance	: 125.0
cm3/1000 strokes Check tolerance	: +- 20.0
cm3/1000s.	: +- 24.0
LOW IDLE	
Rated speed rpm rack travel mm Tolerance mm	: 250 : 8.10 : +- 0.30
Del. quantity cm3/1000 strokes Tolerance	: 25.0
cm3/1000 strokes Check tolerance	: + 3.0
cm3/1000s. Spreed Tolerance	: +- 6.0
cm3/1000 strokes	: 6.0
Check tolerance cm3/1000s.	: 10.0

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

Edition : 05.03.96 Test oil : ISO 4113

Combination No. : 0 402 646 968

Injection pump

Pump designation : PE6P120A320RS7248

: -10

EP type number : 0 412 626 900

Governor

Governer design. : RQV275...1150PA986

Governer no. : 0 421 813 920

Cust. part No. : 1248033/6

Customer-spec. information Customer : DAF : RS 222 L Motor Power KW : 222.0

TEST BENCH REQUIREMENTS

Inlet line : 3.2

Test oil inlet

temp. °C Tolerance °C : +- 2.0

Overflow valve : 1 417 413 025

Inlet press. bar : 1.5 Tolerance bar : + 0.1

Overflow quantity

min. l/h : 130 Tolerance l/h : + 10.0

Test nozzle holde

: 1 688 901 105 assembly

Opening pressure

208.5 bar Tolerance bar : +- 1.5 Test lines : 1 680 750 089

Outside diameter : 8.0

x inside diameter: 3.0 x length mm : 600

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant.

per values ____

BEGINNING OF DELIVERY

Test pressure bar : Tolerance bar : + 1.0

Prestroke mm Tolerance mm : 5.25 : +- 0.05 Check

tolerance mm : \leftarrow 0.10

Rack travel in mm: 12.50 : +- 0.50 Tolerance mm

Firing order : 1-5-3-6-2-

Phasing : 0-60-120-180-240

: -300

Tolerance : +- 0.30

Check

tolerance °NW : +- 0.50

Start of delivery mark

Barrel no. : 1

BASIC SETTING

Rated speed rpm : 1000

Rack travel in mm: 12.25

: +- 0.05 Tolerance mm

Del. quantity

cm3/1000 strokes : 187.0

Check tolerance cm3/1000s + 4.0 Tolerance mm + 0.25	Tolerance cm3/1000 strokes : +- 1.0	- Rated speed rpm : 450 - guide sleeve
Tolerance cm3/1000 strokes : 5.0 Rated speed rpm : 275 Rack travel in mm : 5.40 Tolerance mm : + 0.10 Del. quantity cm3/1000 strokes : 16.0 Tolerance cm3/1000 strokes : 16.0 Tolerance cm3/1000 strokes : + 3.0 Check tolerance cm3/1000 strokes : + 6.0 Spreed Tolerance cm3/1000 strokes : 8.0 Check tolerance cm3/1000 strokes : 8.0 Tolerance cm3/1000 strokes : 8.0 Tolerance cm3/1000 strokes : 12.0 (B) SETTING OF INJECTION PUMP WITH GOVERNOR GUIDE SLEEVE TRAVEL Rated speed rpm : 275 quide sleeve travel mm : + 0.25 Rated speed rpm : 275 quide sleeve travel mm : 5.21 Tolerance mm : + 0.25 Rated speed rpm : 315 Rated speed rpm : 315 Rated speed rpm : 1207 quide sleeve travel mm : 5.21 Tolerance mm : + 0.25 Rated speed rpm : 315 Rated speed rpm : 1.00 Rated speed		travel mm : 3.07
Rated speed rpm : 275 Rack travel in mm : 5.40 Tolerance mm : + 0.10 Del. quantity cm3/1000 strokes : 16.0 Tolerance cm3/1000. Spreed Tolerance cm3/1000. Spreed Tolerance cm3/1000. Check tolerance cm	Tolerance cm3/1000 strokes : 5.0	guide sleeve travel mm : 11.50
Rack travel in mm : 5.40 Tolerance mm : + 0.10 Del. quantity ma3/1000 strokes : 16.0 Tolerance mm : + 1.30 ma3/1000 strokes : 4.0 Spreed Tolerance ma3/1000 strokes : + 6.0 Spreed Tolerance ma3/1000 strokes : 8.0 Check tolerance cm3/1000 strokes : 12.0 (B) SETTING OF INJECTION PUMP WITH GOVERNOR GUIDE SLEEVE TRAVEL Rated speed rpm : 275 guide sleeve travel mm : 1.45 Tolerance mm : + 0.15 Rated speed rpm : 800 guide sleeve travel mm : 5.21 Tolerance mm : + 0.25 Rated speed rpm : 315 guide sleeve travel mm : 5.21 Tolerance mm : + 0.25 Rated speed rpm : 315 guide sleeve travel mm : 1.98 Tolerance mm : + 0.25 Rated speed rpm : 385 guide sleeve travel mm : 1.98 Tolerance mm : + 0.25 Rated speed rpm : 385 guide sleeve travel mm : 1.98 Tolerance mm : + 0.25 Rated speed rpm : 385 quide sleeve travel mm : 1.98 Tolerance mm : + 0.25 Rated speed rpm : 1320 Tolerance mm : + 0.70 Tolerance mm : + 0.70 Tolerance mm : + 0.70 Tolerance mm : + 0.70 Rated speed rpm : 1450	4	GUIDE SLEEVE POSITION
Tolerance ms	+	Rated speed rpm : 1325
Cm3/1000 strokes : + 3.0 FULL LOAD DELIVERY AT FULL LOAD STOP Check tolerance cm3/1000s.	Tolerance mm : +- 0.10 Del. quantity cm3/1000 strokes : 16.0	
Rated speed rpm 1000 Aneroid pressure Aneroid pressure hPa : - Del. quantity cm3/1000 strokes : 8.0 Tolerance cm3/1000 strokes : 187.0 Tolerance cm3/1000 strokes : 187.0 Tolerance cm3/1000 strokes : 187.0 Tolerance cm3/1000 strokes : 187.0 Tolerance cm3/1000 strokes : 1.0 Check tolerance cm3/1000 strokes : + 1.0 Check tolerance cm3/1000 strokes : 5.0 Check tolerance cm3/1000 strokes : 4.0 Check tolerance cm3/1000 strokes : 4.0 Check tolerance cm3/1000 strokes : 4.0 Check tolerance cm3/1000 strokes : 4.0 Check tolerance cm3/1000 strokes : 4.0 Check tolerance cm3/1000 strokes : 5.0 Check tolerance cm3/1000 strokes : 5.0 Check tolerance cm3/1000 strokes : 5.0 Check tolerance cm3/1000 strokes : 4.0 Check tolerance cm3/1000 strokes : 5.0 Check tolerance cm3/1000 strokes : 5.0 Check tolerance cm3/1000 strokes : 4.0 Check tolerance cm3/1000 strokes cm3/1000 strokes cm3/1000 strokes cm3/1000 strokes cm3/1000 strokes cm3/1000 strokes cm3/1000 strokes cm3/1000 strokes cm3/1000 stroke	cm3/1000 strokes : +- 3.0	FULL LOAD DELIVERY AT FULL LOAD STOP
cm3/1000 strokes : 8.0 Del. quantity cm3/1000s. : 12.0 Tolerance cm3/1000 strokes : 12.0 Tolerance cm3/1000 strokes : + 1.0 Check tolerance cm3/1000 strokes : + 1.0 Check tolerance cm3/1000 strokes : + 4.0 Spreed Tolerance Tolerance cm3/1000 strokes : 5.0 Check tolerance cm3/1000 strokes : 5.0 Check tolerance cm3/1000 strokes : 5.0 Spreed Tolerance mm : + 0.15 Control lever guide sleeve control lever travel mm : 8.25 tolerance degree : 119.0 tolerance mm : + 0.25 RATED SPEED Rated speed rpm : 800 RATED SPEED Rated speed rpm : 1207 Tolerance 1/min : + 5 Tolerance mm : + 0.25 Tolerance 1/min : + 5 Rated speed rpm : 315 rack travel mm : 4.00 guide sleeve Rated speed rpm : 1320 travel mm : + 0.25 Tolerance 1/min : + 15 rack travel mm : - 4.00 Rated speed rpm : 1320 Tolerance mm : + 0.25 Tolerance mm : + 0.70 Rated speed rpm : 385 Tolerance mm : + 0.70 Tolerance mm : + 0.25	cm3/1000s. : + 6.0	Aneroid pressure
Tolerance	cm3/1000 strokes : 8.0	Del. quantity
(B) SETTING OF INJECTION PUMP WITH GOVERNOR GUIDE SLEEVE TRAVEL Rated speed rpm : 275 guide sleeve travel mm : 1.45 Tolerance mm : + 0.15 Rated speed rpm : 8.25 Tolerance mm : + 0.25 Rated speed rpm : 8.25 Tolerance mm : + 0.25 Rated speed rpm : 1207 guide sleeve travel mm : 8.25 Tolerance mm : + 0.25 Rated speed rpm : 315 guide sleeve travel mm : 5.21 Tolerance mm : + 0.25 Rated speed rpm : 315 Rated speed rpm : 315 Rated speed rpm : 1.98 Tolerance mm : + 0.25 Rated speed rpm : 1.98 Tolerance mm : + 0.25 Rated speed rpm : 385 guide sleeve travel mm : 1.98 Tolerance mm : + 0.25 Rated speed rpm : 385 Tolerance mm : + 0.70 Tolerance mm : + 0.70 Tolerance mm : + 0.70 Rated speed rpm : 385 Rated speed rpm : 1450 Rated speed rpm : 385 Rated speed rpm : 385 Rated speed rpm : 1450 Rated speed rpm : 385 Rated speed rpm : 1450 Rated speed rpm : 385 Rated speed rpm : 1450		Tolerance cm3/1000 strokes : +- 1.0
Check tolerance cm3/1000s. : 9.0		cm3/1000s. : +- 4.0 Spreed Tolerance
Rated speed rpm : 275 guide sleeve travet mm : 1.45 Tolerance mm : + 0.15 Rated speed rpm : 1207 guide sleeve travet mm : 8.25 Tolerance mm : + 0.25 Rated speed rpm : 800 guide sleeve travet mm : 5.21 Tolerance mm : + 0.25 Rated speed rpm : 5.21 Tolerance mm : + 0.25 Rated speed rpm : 315 guide sleeve travet mm : 1.98 Tolerance mm : + 0.25 Rated speed rpm : 1.98 Tolerance mm : + 0.25 Rated speed rpm : 385 Tolerance mm : + 0.25 Rated speed rpm : 1.98 Tolerance mm : + 0.25 Rated speed rpm : 385 Tolerance mm : + 0.70 guide sleeve travet mm : 2.52	GUIDE SLEEVE TRAVEL	Check tolerance
Tolerance mm	guide sleeve	
guide sleeve 8.25 travel mm 8.25 Tolerance mm + 0.25 Rated speed rpm 800 guide sleeve rack travel mm 11.25 travel mm : 5.21 Rated speed rpm 1207 Tolerance mm : + 0.25 Tolerance 1/min : + 5 Rated speed rpm : 315 Rated speed rpm : 1320 guide sleeve Rated speed rpm : 1320 travel mm : + 0.25 - 70 lerance 1/min : + 15 Rated speed rpm : 385 - 70 lerance mm : + 0.70 Rated speed rpm : 385 - 70 lerance mm : + 0.70 Rated speed rpm : 2.52 - 70 lerance mm : + 0.70		CONTROL LEVER
Rated speed rpm : 800 guide sleeve travel mm : 5.21 Tolerance mm : 4.00 Rated speed rpm : 315 guide sleeve travel mm : 1.98 Tolerance mm : 1.98 Tolerance mm : 4.025 Rated speed rpm : 1.98 Tolerance mm : 4.00 Rated speed rpm : 1.98 Tolerance mm : 4.00 Rated speed rpm : 1.98 Tolerance mm : 4.00 Rated speed rpm : 1.98 Tolerance mm : 4.00 Rated speed rpm : 1.98 Tolerance mm : 4.00 Rated speed rpm : 1.98 Tolerance mm : 1.98 Rated speed rpm : 1.98 Tolerance mm : 4.00 Rated speed rpm : 1.98 Tolerance mm : 1.98 Tolerance mm : 1.98 Rated speed rpm : 1.98 Tolerance mm : 1.98 Tolerance mm : 1.98 Rated speed rpm : 1.98 Tolerance mm : 1.98	guide sleeve	position degree : 119.0
travel mm : 5.21 Rated speed rpm : 1207 Tolerance mm : + 0.25 Tolerance 1/min : + 5 Rated speed rpm : 315 rack travel mm : 4.00 guide sleeve Rated speed rpm : 1320 Tolerance mm : + 0.25 rack travel mm : + 0.70 Rated speed rpm : 385 rack travel mm : + 0.70 guide sleeve Rated speed rpm : 1450 travel mm : 2.52 Rated speed rpm : 1450	Tolerance mm : + 0.25	DATEN ODEEN
guide sleeve 1.98 Tolerance 1/min : + 15 Tolerance mm : + 0.25 1.70 Rated speed rpm : 385 rack travel mm : 0.70 guide sleeve Rated speed rpm : 1450 travel mm : 2.52 2.52	Rated speed rpm : 800	
Rated speed rpm : 385	Rated speed rpm : 800 guide sleeve travel mm : 5.21	rack travel mm : 11.25 Rated speed rpm : 1207
	Rated speed rpm : 800 guide sleeve travel mm : 5.21 Tolerance mm : 4- 0.25 Rated speed rpm : 315 guide sleeve travel mm : 1.98	rack travel mm : 11.25 Rated speed rpm : 1207 Tolerance 1/min : + 5 rack travel mm : 4.00 Rated speed rpm : 1320

LOW IDLE

control lever position degree : 83.0 tolerance degree : + 4.0

Testing:

275 Rated speed rpm 4.70 rack travel mm : + 0.10Tolerance mm

: 175 Rated speed rpm

CRT mm min. : > 6.70

: 340 Rated speed rpm

TORQUE CONTROL

1000 Rated speed rpm 12.25 rack travel mm Tolerance mm : **←** 0.05

1150 Rated speed rpm : 12.25 rack travel mm : + 0.10Tolerance mm

ANEROID/ALTITUDE COMPENSATOR TEST

SETTING

Rated speed rpm : 600 Pressure hPa 1000 rack travel mm : 12.25 : +- 0.05 Tolerance mm

MEASUREMENT

Pressure hPa 600 Rated speed rpm rack travel mm 9.40 : + 0.10Tolerance mm

600 Rated speed rpm :

420 Pressure hPa rack travel mm 11.65 : + - 0.05Tolerance mm

240 Pressure hPa rack travel mm 10.40 : + 0.10Tolerance mm

FUEL DELIVERY CHARACTERISTICS

Aneroid pressure

Rated speed rpm : 600 Del. quantity cm3/1000 strokes : 122.0

Tolerance

cm3/1000 strokes : + 1.0Check tolerance

cm3/1000s. 4.0 : +-

BREAKAWAY

Rack travel in mm : 11.2 Rated speed rpm : 1207 11.25 Tolerance 1/min : + 5

LOW IDLE

Rated speed rpm 275 : rack travel mm 5.40 Tolerance mm : + 0.10Del. quantity cm3/1000 strokes : 16.0 Tolerance cm3/1000 strokes : \leftarrow 3.0 Check tolerance cm3/1000s. : +--6.0 Spreed Tolerance cm3/1000 strokes : 8.0 Check tolerance cm3/1000s. 12.0

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

: 22.03.96 Edition Test oil : ISO 4113

Combination No. : 0 402 648 791

Injection pump

Pump designation : PE8P120A320LS7875 EP type number : 0 412 628 881

Governor

Governer design. : RQV250...1150PA1287

Governer no. : 0 421 814 176

Cust. part No.

Customer-spec. information : DHI Customer : V2-8TC Motor Power KW : 265.0

TEST BENCH REQUIREMENTS

Inlet line : 3.1

Test oil inlet

temp. °C 40 : +-Tolerance °C 2.0

Overflow valve : 1 417 413 025

Inlet press. bar : 1.5 Tolerance bar : +-0.1

Tolerance l/h: +- 10.0

Test nozzle holde

assembly : 1 688 901 105

Opening pressure

208.5 bar Tolerance bar : +- 1.5

Test Lines : 1 680 750 089

Outside diameter : 8.0

x inside diameter: 3.0

x length mm : 600

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant.

per values _____

BEGINNING OF DELIVERY

Test pressure bar : 26.0 Tolerance bar : + 1.0

Prestroke mm 5.20 Tolerance mm

Check

tolerance mm : +- 0.10

Rack travel in mm: 16.00 Tolerance mm : + 1.50

: 8-7-2-6-3 Firing order

: - 5- 4- 1

: 0-45-90-135-180 Phasing

: -225-270-315

: +- 0.30 Tolerance

Check

tolerance °NW : + - 0.50

Start of delivery mark

Tolerance : +- 0.50

Check

tolerance °NW : + 0.75

Barrel no. : 8

BASIC SETTING

Rated speed rpm : 1150

Rack travel in mm: 13.40 : +- 0.05 Tolerance mm

Del. quantity

cm3/1000 strokes : 210.0

N05

Tolerance cm3/1000 strokes	: + 1.0
Check tolerance cm3/1000s.	: + 4.0
Spreed Tolerance cm3/1000 strokes	; 7.0
Check tolerance cm3/1000s.	: 10.0
Rated speed rpm	: 250
Rack travel in mo Tolerance mm Del. quantity	n: 5.60 :+- 0.30
cm3/1000 strokes Tolerance	: 20.0
cm3/1000 strokes Check tolerance	: +- 3.0
cm3/1000s. Spreed	: +- 6.0
Tolerance cm3/1000 strokes	: 5.0
Check tolerance cm3/1000s.	: 8.0
(D) SETTING OF TA	LICOTTON OLIMO
(B) SETTING OF IN WITH GOVERNOR GUIDE SLEEVE TRAV	
GUIDE SLEEVE TRAV	/EL
GUIDE SLEEVE TRAV Rated speed rpm guide sleeve	'EL : 250
GUIDE SLEEVE TRAV	/EL
GUIDE SLEEVE TRAV Rated speed rpm guide sleeve travel mm Tolerance mm Rated speed rpm	EL: 250: 1.61:
GUIDE SLEEVE TRAV Rated speed rpm guide sleeve travel mm Tolerance mm	: 250 : 1.61 : +- 0.20
GUIDE SLEEVE TRAV Rated speed rpm guide sleeve travel mm Tolerance mm Rated speed rpm guide sleeve travel mm Tolerance mm Rated speed rpm Rated speed rpm	: 250 : 1.61 : + 0.20 : 1206 : 8.32 : + 0.15
GUIDE SLEEVE TRAV Rated speed rpm guide sleeve travel mm Tolerance mm Rated speed rpm guide sleeve travel mm Tolerance mm	: 250 : 1.61 : + 0.20 : 1206 : 8.32 : + 0.15
GUIDE SLEEVE TRAV Rated speed rpm guide sleeve travel mm Tolerance mm Rated speed rpm guide sleeve travel mm Tolerance mm Rated speed rpm guide sleeve travel mm Tolerance mm Rated speed rpm guide sleeve travel mm Tolerance mm	EL : 250 : 1.61 : + 0.20 : 1206 : 8.32 : + 0.15 : 1168 : 7.78 : + 0.25
GUIDE SLEEVE TRAV Rated speed rpm guide sleeve travel mm Tolerance mm Rated speed rpm guide sleeve travel mm Tolerance mm Rated speed rpm guide sleeve travel mm Tolerance mm Rated speed rpm guide sleeve travel mm Tolerance mm	EL : 250 : 1.61 : + 0.20 : 1206 : 8.32 : + 0.15 : 1168 : 7.78 : + 0.25
GUIDE SLEEVE TRAV Rated speed rpm guide sleeve travel mm Tolerance mm Rated speed rpm guide sleeve travel mm Tolerance mm Rated speed rpm guide sleeve travel mm Tolerance mm Rated speed rpm guide sleeve travel mm Tolerance mm	EL : 250 : 1.61 : + 0.20 : 1206 : 8.32 : + 0.15 : 1168 : 7.78 : + 0.25 : 640 : 4.91 : + 0.25

Tolerance mm	: +- 0.50			
GUIDE SLEEVE POSITION				
Rated speed rpm	: 1270			
Rack travel in mm Tolerance mm	: 12.40 : +- 1.30			
FULL LOAD DELIVER	Y AT FULL LOAD STOP			
Rated speed rpm Aneroid pressure	: 1150			
hPa	: -			
Del. quantity cm3/1000 strokes	: 210.0			
Tolerance cm3/1000 strokes	: +- 1.0			
Check tolerance cm3/1000s. Spreed	: +- 4.0			
Tolerance cm3/1000 strokes	: 7.0			
Check tolerance cm3/1000s.	: 10.0			
CONTROL LEVER				
control lever position degree tolerance degree	: 56.0 : +- 4.0			
control lever position degree tolerance degree				
RATED SPEED				
rack travel mm Rated speed rpm Tolerance 1/min	: 12.40 : 1195 : +- 5			
rack travel mm Rated speed rpm Tolerance 1/min	: 4.00 : 1275 : + 15			
rack travel mm Tolerance mm Rated speed rpm	: 0.50 : + 0.50 : 1400			
LOW IDLE				

		1
control lever position degree tolerance degree		START CUT-OUT
control lever position degree tolerance degree		Rated speed rpm : > 165 Rated speed rpm : < 190 Check
Testing:		+ speed 1/min : > 155 + Check
Rated speed rpm rack travel mm	: 250 : 5.60	+ speed 1/min : < 210
Tolerance mm	: +- 0.10	FUEL DELIVERY CHARACTERISTICS
Rated speed rpm	: 150	Aneroid pressure hPa : -
CRT mm min.	: > 8.60	Rated speed rpm : 650 Del. quantity
Rated speed rpm	: 300	+ cm3/1000 strokes : 229.0 + Tolerance
TORQUE CONTROL		+ cm3/1000 strokes : +- 3.0 + Check tolerance + cm3/1000s. : +- 6.0
Rated speed rpm rack travel mm Tolerance mm	: 13.40	Aneroid pressure hPa : - Rated speed rpm : 500
Rated speed rpm rack travel mm Tolerance mm	: 13.40	Del. quantity cm3/1000 strokes : 119.0 Tolerance
ANEROID/ALTITUDE COMPENSATOR TEST		- cm3/1000 strokes : + 1.0 - Check tolerance - cm3/1000s. : + 4.0
SETTING		BREAKAWAY
Rated speed rpm Pressure hPa rack travel mm Tolerance mm	: 500 : 1500 : 13.40 : +- 0.05	Rack travel in mm : 12.40 Rated speed rpm : 1195 Tolerance 1/min : +- 5
MEASUREMENT		STARTING FUEL DELIVERY
Pressure hPa Rated speed rpm rack travel mm Tolerance mm	: - : 500 : 8.20 : +- 0.20	Rated speed rpm : 100 Del. quantity cm3/1000 strokes : 195.0
Rated speed rpm	: 500	Tolerance : + 20.0
Pressure hPa rack travel mm Tolerance mm	: 325 : 9.50 : + 0.20	+ Check tolerance + cm3/1000s. : +- 24.0
Pressure hPa rack travel mm Tolerance mm	: 800 : 12.10 : +- 0.05	LOW IDLE

Rated speed rpm rack travel mm Tolerance mm	:	+~ -	250 5.60 0. 30
Del. quantity cm3/1000 strokes	•		20.0
Tolerance	•		20.0
cm3/1000 strokes	:	+	3.0
Check tolerance			
cm3/1000s.	:	+	6.0
Spreed			
Tolerance			F 0
cm3/1000 strokes	•		5.0
Check tolerance cm3/1000s.			8.0
CHIDA LOUGS.	•		0.0

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

: 21.03.96 Edition : ISO 4113 Test oil

Combination No. : 0 402 676 831

Injection pump

Pump designation : PE6P120A320/3LS7895

EP type number : 0 412 626 955

Governor

Governer design. : RSV600...1050P0A642

Governer no. : D 421 833 556

Cust. part No. : 0270748402

Customer-spec. information Customer : MB-NFZ Motor : OM 441 LA Power KW : 285.0

TEST BENCH REQUIREMENTS

Inlet line : 3.1

Test oil inlet

temp. °C 40 Tolerance °C 2.0

Overflow valve : 1 417 413 025

Inlet press. bar : 1.5 Tolerance bar : + 0.1

Tolerance l/h: +- 10.0

Test nozzle holde

: 1 688 901 105 assembly

Opening pressure

208.5 bar Tolerance bar : +- 1.5

Test Lines : 1 680 750 075

Outside diameter : 8.0

3.0 x inside diameter:

x length mm : 1000

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant.

per values _____

BEGINNING OF DELIVERY

Test pressure bar : Tolerance bar : +-1.0

Prestroke mm 4.75 Tolerance mm : +- 0.05

Check

tolerance mm : + 0.10

Rack travel in mm: 20.50 Tolerance mm: +-0.50

: 6-3-5-2-4-Firing order

: 1

: 0-45-120-165-240 Phasing

: -285

Tolerance : + 0.30

Check

tolerance *NW : +- 0.50

Start of delivery mark

: +- 0.10 Tolerance

Check

tolerance °NW : +- 0.75

: 6 Barrel no.

BASIC SETTING

Rated speed rpm : 1075

Rack travel in mm : 14.20

Tolerance mm : +- 0.05

N₀9

Del. quantity cm3/1000 strokes : 251.0	Check tolerance cm3/1000s. : +- 4.0 Spreed
Tolerance cm3/1000 strokes : + 1.0	Tolerance cm3/1000 strokes : 6.0 Check tolerance
Check tolerance cm3/1000s. : +- 4.0	cm3/1000s. : 9.0
Sanara T	
Spreed Tolerance cm3/1000 strokes : 6.0	CONTROL LEVER
Check tolerance cm3/1000s. : 9.0	position degree : 93.0 tolerance degree : + 4.0
Rated speed rpm : 600	RATED SPEED
Rack travel in mm: 4.20 Tolerance mm: + 0.30 Del. quantity cm3/1000 strokes: 17.0	rack travel mm : 13.20 Rated speed rpm : 1115 Tolerance 1/min : + 5
Tolerance + 3.0	
Check tolerance cm3/1000s. : +- 6.0	FOM IDE
Spreed	
Tolerance cm3/1000 strokes : 8.0	control lever position degree : 77.0
Check tolerance	tolerance degree : +- 4.0
cm3/1000s. : 12.0	Testing:
(B) SETTING OF INJECTION PUMP WITH GOVERNOR	Rated speed rpm : 600 rack travel mm : 4.20 Tolerance mm : + 0.10
CHAPE OF EACH DOCATION	Rated speed rpm : 100
GUIDE SLEEVE POSITION Rated speed rpm : 800	CRT mm min. : > 19.50
Rack travel in mm: 0.50	SET IDLE AUXILIARY SPRING
Tolerance mm : + 0.20	rack travel mm : 2.00
governor spring pre-tension click setting x : 4.00	TORQUE CONTROL
+	Rated speed rpm : 1075
	rack travel mm : 14.20
FULL LOAD DELIVERY AT FULL LOAD STOP	Tolerance mm : +- 0.05
Rated speed rpm : 1075	Rated speed rpm : 800
Aneroid pressure	rack travel mm : 15.25
hPa : 1200 + Del. quantity +	Tolerance mm : + 0.10
cm3/1000 strokes : 251.0	Rated speed rpm : 1000
Tolerance	rack travel mm : 14.85
cm3/1000 strokes : +- 1.0	rack travel mm : 14.85 Tolerance mm : +- 0.05
T	

End of test specification sheet

FUEL DELIVERY CHARACTERISTICS

Aneroid pressure

hPa : 1200 Rated speed rpm : 800

Del. quantity

cm3/1000 strokes : 291.0

Tolerance

cm3/1000 strokes : +- 3.0

Check tolerance

cm3/1000s. : +- 6.0

BREAKAWAY

Rack travel in mm: 13.20
Rated speed rpm: 1115
Tolerance 1/min: +- 5

STARTING FUEL DELIVERY

Rated speed rpm : 100
rack travel mm : 15.75
Tolerance mm : + 0.25
Del. quantity
cm3/1000 strokes : 270.0
Tolerance
cm3/1000 strokes : + 10.0

Check tolerance cm3/1000s. : +- 14.0

LOW IDLE

cm3/1000 strokes Check tolerance

cm3/1000s.

Rated speed rpm 600 4.20 rack travel mm 0.30 Tolerance mm Del. quantity 17.0 cm3/1000 strokes Tolerance cm3/1000 strokes 3.0 -Check tolerance cm3/1000s. 6.0 Spreed Tolerance

8.0

12.0

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

Edition : 22.03.96 Test oil : ISO 4113

Combination No. : 0 402 946 017

Injection pump

Pump designation : PES6P120A720RS8039

EP type number : 0 412 926 026

Governor

Governer design. : RQV250...950PA1243

: 0 421 814 162 Governer no.

Cust. part No. : 1374808

Customer-spec. information Customer : SCANIA : DSC 11.79 Motor

TEST BENCH REQUIREMENTS

Inlet line : EHAB

Test oil inlet

temp. °C 40 Tolerance °C

Overflow valve : 2 417 413 082

Inlet press. bar : 2.5 Tolerance bar : + 0.1

Overflow quantity

min. L/h : 115 Tolerance L/h : +- 10.0

Test nozzle holde

: 1 688 901 104 assembly

Opening pressure

: 251.5 bar : +- 1.5 Tolerance bar

Test lines : 1 680 750 008

Outside diameter : 6.0

x inside diameter: 2.0 600 x length mm :

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant.

per values _____

REMARKS

BEGINNING OF DELIVERY

Test pressure bar : 26.0 Tolerance bar : + 1.0

Prestroke mm Tolerance mm : 4.15 : + 0.05

Check

tolerance mm : \leftarrow 0.10

Rack travel in mm : 20.50

Tolerance mm : + 0.50

Firing order : 1-5-3-6-2-

Phasing : 0-60-120-180-240

: -300

Tolerance : + 0.30

Check

tolerance "NW : +- 0.50

Start of delivery blocking

Tolerance : + - 0.50

Check

tolerance °NW : + 0.75

Barrel no.

: 1

BASIC SETTING

Rated speed rpm : 700

Rack travel in mm : 11.90 Tolerance mm : +- 0.05

لِـ ـ ـ ـ ـ ـ ـ ـ ـ ـ ـ ـ ـ ـ ـ ـ ـ ـ ـ	Rated speed rpm : 1260
Del. quantity	guide sleeve
cm3/1000 strokes : 298.0 -	travel mm : 11.50
Tolerance	- Tolerance mm : +- 0.50
cm3/1000 strokes : +- 1.0	
	GUIDE SLEEVE POSITION
Check tolerance - cm3/1000s. : +- 9.0	- - Rated speed rpm : 1165
	- Nated speed (pm . 1103
Spreed	- Rack travel in mm : 10.90
Tolerance - cm3/1000 strokes : 8.0	Tolerance mm : +- 1.30
Clino Florida Strokes : 0.0	
Check tolerance	- FULL LOAD DELIVERY AT FULL LOAD STOP
cm3/1000s. : 14.0 -	- - Rated speed rpm : 700
Rated speed rpm : 250	- Rated speed rpm : 700 - Aneroid pressure
+	- hPa : 1500
Rack travel in mm: 5.60	- Det. quantity
Tolerance mm : + 0.30 + Del. quantity	- cm3/1000 strokes : 298.0 - Tolerance
cm3/1000 strokes : 21.0	- cm3/1000 strokes : +- 1.0
Tolerance	- Check tolerance
cm3/1000 strokes : +- 3.0 +- Check tolerance +-	- cm3/1000s. : +- 9.0 - Spreed
cm3/1000s. : +- 6.0	- Spreed - Tolerance
Spreed	- cm3/1000 strokes : 8.0
Tolerance	- Check tolerance
cm3/1000 strokes : 4.0 + Check tolerance	- cm3/1/300s. : 14.0
cm3/1000s. : 8.0	•
	•
+	
(D) SETTING OF THIECTION DIME	CONTROL LEVER
(B) SETTING OF INJECTION PUMP WITH GOVERNOR	CONTROL LEVER control lever
(B) SETTING OF INJECTION PUMP WITH GOVERNOR	- control lever - position degree : 55.0
WITH GOVERNOR	· control lever
	control lever position degree : 55.0 tolerance degree : +- 4.0
WITH GOVERNOR	control lever position degree : 55.0 tolerance degree : +- 4.0 control lever position degree : 119.0
WITH GOVERNOR GUIDE SLEEVE TRAVEL Rated speed rpm : 250 guide sleeve	control lever position degree : 55.0 tolerance degree : +- 4.0 control lever
WITH GOVERNOR GUIDE SLEEVE TRAVEL Rated speed rpm : 250 guide sleeve travel mm : 1.33	control lever position degree : 55.0 tolerance degree : +- 4.0 control lever position degree : 119.0 tolerance degree : +- 4.0
WITH GOVERNOR GUIDE SLEEVE TRAVEL Rated speed rpm : 250 guide sleeve	control lever position degree : 55.0 tolerance degree : +- 4.0 control lever position degree : 119.0
WITH GOVERNOR GUIDE SLEEVE TRAVEL Rated speed rpm : 250 guide sleeve travel mm : 1.33 Tolerance mm : + 0.20 Rated speed rpm : 1008	control lever position degree : 55.0 tolerance degree : + 4.0 control lever position degree : 119.0 tolerance degree : + 4.0 RATED SPEED rack travel mm : 10.90
WITH GOVERNOR GUIDE SLEEVE TRAVEL Rated speed rpm : 250 guide sleeve travel mm : 1.33 Tolerance mm : + 0.20 Rated speed rpm : 1008 guide sleeve	control lever position degree : 55.0 tolerance degree : + 4.0 control lever position degree : 119.0 tolerance degree : + 4.0 RATED SPEED rack travel mm : 10.90 Rated speed rpm : 995
WITH GOVERNOR GUIDE SLEEVE TRAVEL Rated speed rpm : 250 guide sleeve travel mm : 1.33 Tolerance mm : + 0.20 Rated speed rpm : 1008	control lever position degree : 55.0 tolerance degree : + 4.0 control lever position degree : 119.0 tolerance degree : + 4.0 RATED SPEED rack travel mm : 10.90
WITH GOVERNOR GUIDE SLEEVE TRAVEL Rated speed rpm : 250 guide sleeve travel mm : 1.33 Tolerance mm : + 0.20 Rated speed rpm : 1008 guide sleeve travel mm : 8.61 Tolerance mm : + 0.15	control lever position degree : 55.0 tolerance degree : +- 4.0 control lever position degree : 119.0 tolerance degree : +- 4.0 RATED SPEED rack travel mm : 10.90 Rated speed rpm : 995 Tolerance 1/min : +- 5 rack travel mm : 4.00
WITH GOVERNOR GUIDE SLEEVE TRAVEL Rated speed rpm : 250 guide sleeve travel mm : 1.33 Tolerance mm : + 0.20 Rated speed rpm : 1008 guide sleeve travel mm : 8.61 Tolerance mm : + 0.15 Rated speed rpm : 732	control lever position degree : 55.0 tolerance degree : + 4.0 control lever position degree : 119.0 tolerance degree : + 4.0 RATED SPEED rack travel mm : 10.90 Rated speed rpm : 995 Tolerance 1/min : + 5 rack travel mm : 4.00 Rated speed rpm : 1115
WITH GOVERNOR GUIDE SLEEVE TRAVEL Rated speed rpm : 250 guide sleeve travel mm : 1.33 Tolerance mm : + 0.20 Rated speed rpm : 1008 guide sleeve travel mm : 8.61 Tolerance mm : + 0.15 Rated speed rpm : 732 guide sleeve	control lever position degree : 55.0 tolerance degree : +- 4.0 control lever position degree : 119.0 tolerance degree : +- 4.0 RATED SPEED rack travel mm : 10.90 Rated speed rpm : 995 Tolerance 1/min : +- 5 rack travel mm : 4.00
WITH GOVERNOR GUIDE SLEEVE TRAVEL Rated speed rpm : 250 guide sleeve travel mm : 1.33 Tolerance mm : + 0.20 Rated speed rpm : 1008 guide sleeve travel mm : 8.61 Tolerance mm : + 0.15 Rated speed rpm : 732	control lever position degree : 55.0 tolerance degree : + 4.0 control lever position degree : 119.0 tolerance degree : + 4.0 RATED SPEED rack travel mm : 10.90 Rated speed rpm : 995 Tolerance 1/min : + 5 rack travel mm : 4.00 Rated speed rpm : 1115 Tolerance 1/min : + 15 rack travel mm : 0.50
WITH GOVERNOR GUIDE SLEEVE TRAVEL Rated speed rpm : 250 guide sleeve travel mm : 1.33 Tolerance mm : + 0.20 Rated speed rpm : 1008 guide sleeve travel mm : 8.61 Tolerance mm : + 0.15 Rated speed rpm : 732 guide sleeve travel mm : 6.35 Tolerance mm : + 0.25	control lever position degree : 55.0 tolerance degree : + 4.0 control lever position degree : 119.0 tolerance degree : + 4.0 RATED SPEED rack travel mm : 10.90 Rated speed rpm : 995 Tolerance 1/min : + 5 rack travel mm : 4.00 Rated speed rpm : 1115 Tolerance 1/min : + 15 rack travel mm : 0.50 Tolerance mm : + 0.50
WITH GOVERNOR GUIDE SLEEVE TRAVEL Rated speed rpm : 250 guide sleeve travel mm : 1.33 Tolerance mm : + 0.20 Rated speed rpm : 1008 guide sleeve travel mm : 8.61 Tolerance mm : + 0.15 Rated speed rpm : 732 guide sleeve travel mm : 6.35 Tolerance mm : + 0.25 Rated speed rpm : 470	control lever position degree : 55.0 tolerance degree : + 4.0 control lever position degree : 119.0 tolerance degree : + 4.0 RATED SPEED rack travel mm : 10.90 Rated speed rpm : 995 Tolerance 1/min : + 5 rack travel mm : 4.00 Rated speed rpm : 1115 Tolerance 1/min : + 15 rack travel mm : 0.50
WITH GOVERNOR GUIDE SLEEVE TRAVEL Rated speed rpm : 250 guide sleeve travel mm : 1.33 Tolerance mm : + 0.20 Rated speed rpm : 1008 guide sleeve travel mm : 8.61 Tolerance mm : + 0.15 Rated speed rpm : 732 guide sleeve travel mm : 6.35 Tolerance mm : + 0.25	control lever position degree : 55.0 tolerance degree : + 4.0 control lever position degree : 119.0 tolerance degree : + 4.0 RATED SPEED rack travel mm : 10.90 Rated speed rpm : 995 Tolerance 1/min : + 5 rack travel mm : 4.00 Rated speed rpm : 1115 Tolerance 1/min : + 15 rack travel mm : 0.50 Tolerance mm : + 0.50
WITH GOVERNOR GUIDE SLEEVE TRAVEL Rated speed rpm : 250 guide sleeve travel mm : 1.33 Tolerance mm : + 0.20 Rated speed rpm : 1008 guide sleeve travel mm : 8.61 Tolerance mm : + 0.15 Rated speed rpm : 732 guide sleeve travel mm : 6.35 Tolerance mm : + 0.25 Rated speed rpm : 470 guide sleeve	control lever position degree : 55.0 tolerance degree : + 4.0 control lever position degree : 119.0 tolerance degree : + 4.0 RATED SPEED rack travel mm : 10.90 Rated speed rpm : 995 Tolerance 1/min : + 5 rack travel mm : 4.00 Rated speed rpm : 1115 Tolerance 1/min : + 15 rack travel mm : 0.50 Tolerance mm : + 0.50

		‡	Tolerance mm	: +- 0.05
control lever position degree tolerance degree	: 81.0 : +- 4.0	+	START CUT-OUT	400
		+	Rated speed rpm Rated speed rpm	
tolerance degree Testing:	: +- 4.0	‡	Check speed 1/min Check	: > 80
Rated speed rpm rack travel mm	: 5.60	‡	speed 1/min	: < 190
Tolerance mm	: + 0.10	<u> </u>	FUEL DELIVERY CHA	MRACTERISTICS
Rated speed rpm	: 150	‡	Aneroid pressure hPa	: 1500
CRT mm min.	: > 8.10	‡	Rated speed rpm Del. quantity	: 950
Rated speed rpm	: 300	+	cm3/1000 strokes Tolerance	
TORQUE CONTROL			cm3/1000 strokes Check tolerance	: + 4.0
Rated speed rpm	: 700	‡	cm3/1000s.	: +- 9.0
rack travel mm Tolerance mm	: 11.90 : + 0.05	+	Aneroid pressure	•
		Ŧ	Rated speed rpm	500
Rated speed rpm rack travel mm	: 11.90	‡	Del. quantity cm3/1000 strokes	: 197.0
Tolerance mm	: ← 0.05	‡	Tolerance cm3/1000 strokes	: ← 1.0
ANEROID/ALTITUDE COMPENSATOR TEST			Check tolerance cm3/1000s.	: +- 4.0
COMPENSATOR (EST		Ŧ		
SETTING		‡	BREAKAWAY	
Rated speed rpm Pressure hPa rack travel mm Tolerance mm	: 500 : 1500 : 11.90 : ← 0.05		Rack travel in mm Rated speed rpm Tolerance 1/min	: 10.90 : 995 : +- 5
MEASUREMENT		‡	STARTING FUEL DEL	IVERY
Pressure hPa Rated speed rpm rack travel mm Tolerance mm	: 500 : 9.20 : + 0.20	‡	Rated speed rpm rack travel mm Tolerance mm Del. quantity	: 100 : 20.50 : + 0.50
Rated speed rpm	: 500	Ŧ	cm3/1000 strokes	: 225.0
Pressure hPa	: 350	‡	Tolerance cm3/1000 strokes	: +- 20.0
rack travel mm Tolerance mm	: 10.30 : + 0.15	‡	Check tolerance cm3/1000s.	: +- 24.0
Pressure hPa rack travel mm	: 600 : 11.40	+		

LOW IDLE

Rated speed rpm 250 rack travel mm 5.60 +- 0.30 Tolerance mm Del. quantity cm3/1000 strokes : 21.0 Tolerance cm3/1000 strokes : +-3.0 Check tolerance cm3/1000s. 6.0 Spreed Tolerance cm3/1000 strokes 4.0 Check tolerance cm3/1000s. 8.0

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

Edition : 22.03.96 Test oil : ISO 4113

Combination No. : 0 402 996 002

Injection pump

Pump designation : PE6P12OA72OLS8032 EP type number : 0 412 926 023

Governor

Governer design. : RE30

Governer no. : 0 421 890 025

Cust. part No. : 1364497

Customer-spec. information Customer : SCANIA Motor : DSC1201

TEST BENCH REQUIREMENTS

Inlet line : EHAB

Test oil inlet

temp. °C : 40
Tolerance °C : + 2.0

Overflow valve : 2 417 413 082

Inlet press. bar : 2.5
Tolerance bar : + 0.1

Tolerance l/h: \leftarrow 20.0

Test nozzle holde

assembly : 1 688 901 104

Opening pressure

bar : 251.5 Tolerance bar : + 1.5

Test Lines : 1 680 750 008

Outside diameter : 6.0

x inside diameter: 2.0 x length mm : 600

REMARKS

Pump-specific values in Section (B) must be observed!

(A) INJECTION PUMP SETTINGS

No basic setting.

Setting of constant delivery

under Section C.

BEGINNING OF DELIVERY

Test pressure bar : 26.0 Tolerance bar : + 1.0

Prestroke mm : 3.85

Prestroke mm : 3.85
Tolerance mm : + 0.05
Tolerance mm : + 0.05

Check

tolerance mm : \leftarrow 0.10

Check

tolerance mm: + 0.10

Rack travel in mm : 10.50

Rack travel in mm : 10.50
Tolerance mm : + 1.50
Tolerance mm : + 1.50

Firing order : 1-5-3-6-2-

• 4

Phasing : 0-60-120-180-240

: -300

Tolerance : \leftarrow 0.30

Check

tolerance °NW : + 0.50

Start of delivery blocking

*NW after s.o.d. : 180.00

Tolerance : +- 0.50

Check tolerance *NW : +- 0.75 Barrel no. 1 (B) POSITIONER TESTING Warm-up time: 3 minutes at n=600 min-1, Uact = 2.5 VTESTING & SETTING RACK TRAVEL SENSOR POSITION Engine speed min-1: 0 Setting point (P, R and H pump) Uact V 3.100 CRT mm 13.00 Tolerance mm : +/- 0.05 Check : +/- 0.10 tolerance mm Check value (P, R and H pump) 1.700 Uact V CRT mm 6.15 : +/- 0.25 Tolerance mm Check tolerance mm : +/- 0.30Setting point (amua M) 3.100 Uact V 12.50 CRT mm : +/- 0.05 Tolerance mm Check : +/- 0.10 tolerance mm Check value (amuq M) 1.700 Uact V CRT mm 5.50 : +/- 0.25 Tolerance mm Check

: +/- 0.30

: Value with deenergised adjusting magnet

and control rod in stop position. 0.75 CRT mm Tolerance mm : +/- 0.25 Check : +/- 0.35 tolerance mm ENGINE-SPEED SENSOR (All P and R pumps not H and M pumps) Test with control rod in stop position Engine speed min-1: 60 Amplitude V : 1.4 Tolerance V : +/- 0.6 Check tolerance V : +/- 1.20 Engine speed min-1: 600 Difference Amplitude to Amplitude V : max.1.4 (C) INJECTION PUMP WITH POSITIONER TEST POINT V1 Rated speed rpm 700 Uact V 3,400 Del. quantity cm3/1000 strokes : 372.0 Tolerance cm3/1000 strokes : +- 1.0Check tolerance cm3/1000s. : + 11.0Spreed Tolerance cm3/1000 strokes : 8.0 Check tolerance cm3/1000s. 14.0 FUEL DELIVERY CHARACTERISTICS 950 Rated speed rpm 3,400 Uact V Del. quantity cm3/1000 strokes : 327.0 Tolerance

cm3/1000 strokes : +- 4.0

: + 10.0

Check tolerance

cm3/1000s.

Uact V

tolerance mm

Stop position

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

Edition : 26.03.96 Test oil : ISO 4113

Combination No. : 0 403 446 301

Injection pump

Pump designation : PES6MW100/720RS1131

EP type number : 0 413 406 165

Governor

Governer design. : RQV300...1300MW50

: -22

: 0 420 083 268 Governer no.

Cust. part No. : 0220745102

Customer-spec. information : MB-NFZ Customer : 0M366LA Motor Power KW : 177.0

TEST BENCH REQUIREMENTS

Inlet line : 3.1

Test oil inlet

temp. °C 2.0 Tolerance °C

Overflow valve : 1 419 992 198

Inlet press. bar : 1.5

Test nozzle holde

: 1 688 901 101 assembly

Opening pressure

208.5 bar Tolerance bar

Test lines : 1 680 750 089 Outside diameter :

x inside diameter:

3.0

x length mm :

600

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant.

per values _____

BEGINNING OF DELIVERY

31.0 Test pressure bar : Tolerance bar : + 1.0

Prestroke mm 3.65 Tolerance mm : + - 0.05

Check

: **←** 0.10 tolerance mm

Rack travel in mm: 10.50 Tolerance mm : + 1.50

: 1-5-3-6-2-Firing order

: 0-60-120-180-240 Phasing

: -300

: +- 0.50 Tolerance

Check

tolerance °NW : + 0.75

BASIC SETTING

Rated speed rpm : 1300

Rack travel in mm: 14.45

Tolerance mm : +- 0.05

Del. quantity

cm3/1000 strokes : 113.0

Tolerance

cm3/1000 strokes : +-

Check tolerance

cm3/1000s.

: +- 3.0

1.0

Spreed

Tolerance cm3/1000 strokes : 3.5	Tolerance mm : + 2.70
Check tolerance cm3/1000s. : 6.0	FULL LOAD DELIVERY AT FULL LOAD STOP
Rated speed rpm ; 300	Rated speed rpm : 1300 Aneroid pressure hPa : 1000
Rack travel in mm : 7.30 Tolerance mm : + 0.20 Del. quantity	Del. quantity cm3/1000 strokes: 113.0 Tolerance
cm3/1000 strokes : 12.0 Tolerance	+ cm3/1000 strokes : +- 1.0 - Check tolerance
cm3/1000 strokes : +- 2.0 Check tolerance	cm3/1000s. : +- 3.0 Spreed
cm3/1000s. : + 4.5 Spreed	Tolerance cm3/1000 strokes : 3.5
Tolerance cm3/1000 strokes : 3.5	Check tolerance cm3/1000s. : 6.0
Check tolerance : 5.5	<u> </u>
(B) SETTING OF INJECTION PUMP	CONTROL LEVER
WITH GOVERNOR	control lever position degree : 114.0 tolerance degree : +- 4.0
GUIDE SLEEVE TRAVEL	RATED SPEED
Rated speed rpm : 300 guide sleeve	+ rack travel mm : 13.40
travel mm : 1.37 Tolerance mm : + 0.20	Rated speed rpm : 1345 Tolerance 1/min : + 5
Rated speed rpm : 1355 guide sleeve travel mm : 8.66 Tolerance mm : + 0.15	rack travel mm : 4.00 Rated speed rpm : 1480 Tolerance 1/min : + 15
Rated speed rpm : 885 guide sleeve	rack travel mm : 0.50 Tolerance mm : + 0.50 Rated speed rpm : 1550
travel mm : 5.01 Tolerance mm : + 0.25	Tarea speed (pin : 1330
Rated speed rpm : 500 guide sleeve	LOW IDLE
travel mm : 2.92 Tolerance mm : + 0.25	+ control lever + position degree : 80.0
Rated speed rpm : 1610 guide sleeve	tolerance degree : + 4.0
travel mm : 11.50 Tolerance mm : + 0.50	Testing:
GUIDE SLEEVE POSITION	Rated speed rpm : 300 rack travel mm : 7.30 Tolerance mm : + 0.10
Rated speed rpm : 1450	Rated speed rpm : 200
Rack travel in mm: 9.00	CRT mm min. :> 8.50
THE PROPERTY OF THE PROPERTY O	, or man marite

N20

		+ Tolerance
TORQUE CONTROL		
	4700	+ cm3/1000s. : +- 4.0
Rated speed rpm rack travel mm		+ Spreed + Tolerance
Tolerance mm		cm3/1000 strokes : 5.0
10tor arrow him	, , 0, 0,	+ Check tolerance
Rated speed rpm	: 750	+ cm3/1000s. : 7.0
rack travel mm		+
Tolerance mm	: +- 0.10	+ Aneroid pressure + hPa : -
		Rated speed rpm : 500
ANEROID/ALTITUDE		+ Del. quantity
COMPENSATOR TEST		+ cm3/1000 strokes : 42.0
		+ Tolerance
SETTING		+ cm3/1000 strokes : +- 1.0 + Check tolerance
25117140		+ cm3/1000s. : +- 3.0
Rated speed rpm	: 500	
Pressure hPa	: 1000	
rack travel mm		BREAKAWAY
Tolerance mm	: +- 0.05	†
MEASUREMENT		Rack travel in mm : 13.40
TIEMOOINEI IETT		Rated speed rpm : 1345
Pressure hPa	•	+ Tolerance 1/min : +- 5
Rated speed rpm	: 500	+
rack travel mm		†
Tolerance mm	: +- 0.05	STARTING FUEL DELIVERY
Rated speed rpm	: 500	T STAKTING TOLL DELIVERT
		+ Rated speed rpm : 100
Pressure hPa	: 500	- Del. quantity
rack travel mm		+ cm3/1000 strokes : 105.0
Tolerance mm	: + 0.10	+ Tolerance + cm3/1000 strokes : +- 5.0
Pressure hPa	: 200	Check tolerance
rack travel mm	: 11.20	+ cm3/1000s. : +- 8.0
Tolerance mm	: +- 0.10	+
		†
START CUT-OUT		
0174K1 001 001		LOW IDLE
Rated speed rpm	: > 100	+
Rated speed rpm	: < 220	+ Rated speed rpm : 300
Check		+ rack travel mm : 7.30 + Tolerance mm : + 0.20
speed 1/min	: > 80	Del. quantity
Check		- cm3/1000 strokes : 12.0
speed 1/min	: < 240	Tolerance
		+ cm3/1000 strokes : +- 2.0
ELEL DEL TUENY CHA	ADACTEDISTICS	+ Check tolerance + cm3/1000s. : +- 4.5
FUEL DELIVERY CHA	HUMP I EKTO I TOO	+ Spreed
Aneroid pressure		+ Tolerance
hPa	: 1000	+ cm3/1000 strokes : 3.5
Rated speed rpm	: 750	Check tolerance
Del. quantity	. 400.0	+ cm3/1000s. : 5.5
cm3/1000 strokes	: 109.0	+

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

Edition : 22.03.96 Test oil : ISO 4113

Combination No. : 0 403 476 145

Injection pump

Pump designation : PES6MW100/320RS1244

EP type number : 0 413 406 244

Governor

Governer design. : RSV500...1100MW1A399

Governer no. : 0 420 085 289

Cust. part No.

Customer-spec. information Customer : SISU Motor : 634 DWE Power KW : 154.0

TEST BENCH REQUIREMENTS

Inlet line : 3.1

Test oil inlet

temp. °C : 40 Tolerance °C : + 2.0

Overflow valve : 1 417 413 047

Inlet press. bar : 1.5

Test nozzle holde

assembly : 1 688 901 101

Opening pressure

bar : 208.5 Tolerance bar : + 1.5

Test Lines : 1 680 750 008

Outside diameter : 6.0

x inside diameter: 2.0 x length mm : 600

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant.

per values ____

BEGINNING OF DELIVERY

Test pressure bar : 31.0 Tolerance bar : + 1.0

Prestroke mm : 3.55
Tolerance mm : + 0.05

Check

tolerance mm : +- 0.10

Rack travel in mm : 10.50 Tolerance mm : + 1.50

Firing order : 1-5-3-6-2-

: 4

Phasing : 0-60-120-180-240

: -300

Tolerance : + 0.50

Check

tolerance °NW : +- 0.75

Start of delivery blocking

Barrel no. : '

BASIC SETTING

Rated speed rpm : 1075

Rack travel in mm : 12.10
Tolerance mm : + 0.05

Del. quantity cm3/1000 strokes : 140.0

Tolerance

cm3/1000 strokes : +- 1.0

Check tolerance cm3/1000s. : + 4.0

Spreed Tolerance	CONTROL LEVER
cm3/1000 strokes : 4.0	control lever
Check tolerance	position degree : 112.0
cm3/1000s. : 7.5	tolerance degree : +- 4.0
Rated speed rpm : 500	RATED SPEED
Rack travel in mm: 3.30	rack travel mm : 11.10
Tolerance mm : + 0.20	Rated speed rpm : 1130
Del. quantity +	Tolerance 1/min : +- 5
cm3/1000 strokes : 11.0	made through the A CO
Tolerance + 2.0 +	rack travel mm : 4.00 Rated speed rpm : 1180
Check tolerance	Tolerance 1/min : +- 15
cm3/1000s. : + 4.5	
Spreed	rack travel mm : 1.00
Tolerance	Tolerance mm : + 0.70
cm3/100G strokes : 3.5	Rated speed rpm : 1300
Check tolerance + cm3/1000s. : 5.5	rack travel mm : 4.00
1 3.5	Rated speed rpm : 1190
+	The special spin of the spin o
(B) SETTING OF INJECTION PUMP	
WITH GOVERNOR +	
†	LOW IDLE
GUIDE SLEEVE POSITION	control lever
Data dament many a 200	position degree : 84.0
Rated speed rpm : 800	tolerance degree : +- 4.0
Rack travel in mm: 0.65	Setting point w/out bumper spring
Tolerance mm : + 0.35	
<u> </u>	- · · · · · · · · · · · · · · · · · · ·
	Rated speed rpm : 500
governor spring	Rated speed rpm : 500 rack travel mm : 2.80
pre-tension +	rack travel mm : 2.80
pre-tension click setting x : 5.50	rack travel mm : 2.80 Testing: Rated speed rpm : 500
pre-tension +	rack travel mm : 2.80 Testing: Rated speed rpm : 500 rack travel mm : 3.30
FULL LOAD DELIVERY AT FULL LOAD STOP	rack travel mm : 2.80 Testing: Rated speed rpm : 500
FULL LOAD DELIVERY AT FULL LOAD STOP Rated speed rpm : 1075	rack travel mm : 2.80 Testing: Rated speed rpm : 500 rack travel mm : 3.30 Tolerance mm : +- 0.10
FULL LOAD DELIVERY AT FULL LOAD STOP	rack travel mm : 2.80 Testing: Rated speed rpm : 500 rack travel mm : 3.30
FULL LOAD DELIVERY AT FULL LOAD STOP Rated speed rpm : 1075 Aneroid pressure hPa : 1200 Del. quantity	rack travel mm : 2.80 Testing: Rated speed rpm : 500 rack travel mm : 3.30 Tolerance mm : +- 0.10 rack travel mm : 2.00
FULL LOAD DELIVERY AT FULL LOAD STOP Rated speed rpm : 1075 Aneroid pressure hPa : 1200 Del. quantity cm3/1000 strokes : 140.0	rack travel mm : 2.80 Testing: Rated speed rpm : 500 rack travel mm : 3.30 Tolerance mm : +- 0.10 rack travel mm : 2.00 Rated speed rpm : 540
FULL LOAD DELIVERY AT FULL LOAD STOP Rated speed rpm : 1075 Aneroid pressure hPa : 1200 Del. quantity cm3/1000 strokes : 140.0 Tolerance	rack travel mm : 2.80 Testing: Rated speed rpm : 500 rack travel mm : 3.30 Tolerance mm : +- 0.10 rack travel mm : 2.00 Rated speed rpm : 540 Tolerance 1/min : +- 30
pre-tension click setting x : 5.50 FULL LOAD DELIVERY AT FULL LOAD STOP Rated speed rpm : 1075 Aneroid pressure hPa : 1200 Del. quantity cm3/1000 strokes : 140.0 Tolerance cm3/1000 strokes : + 1.0	rack travel mm : 2.80 Testing: Rated speed rpm : 500 rack travel mm : 3.30 Tolerance mm : +- 0.10 rack travel mm : 2.00 Rated speed rpm : 540
pre-tension click setting x : 5.50 FULL LOAD DELIVERY AT FULL LOAD STOP Rated speed rpm : 1075 Aneroid pressure hPa : 1200 Del. quantity cm3/1000 strokes : 140.0 Tolerance cm3/1000 strokes : + 1.0 Check tolerance	Testing: Rated speed rpm : 500 rack travel mm : 3.30 Tolerance mm : +- 0.10 rack travel mm : 2.00 Rated speed rpm : 540 Tolerance 1/min : +- 30 TORQUE CONTROL
pre-tension click setting x : 5.50 FULL LOAD DELIVERY AT FULL LOAD STOP Rated speed rpm : 1075 Aneroid pressure hPa : 1200 Del. quantity cm3/1000 strokes : 140.0 Tolerance cm3/1000 strokes : + 1.0	rack travel mm : 2.80 Testing: Rated speed rpm : 500 rack travel mm : 3.30 Tolerance mm : + 0.10 rack travel mm : 2.00 Rated speed rpm : 540 Tolerance 1/min : + 30 TORQUE CONTROL Rated speed rpm : 1075 rack travel mm : 12.10
pre-tension click setting x : 5.50 FULL LOAD DELIVERY AT FULL LOAD STOP Rated speed rpm : 1075 Aneroid pressure hPa : 1200 Del. quantity cm3/1000 strokes : 140.0 Tolerance cm3/1000 strokes : + 1.0 Check tolerance cm3/1000s. : + 4.0 Spreed Tolerance	rack travel mm : 2.80 Testing: Rated speed rpm : 500 rack travel mm : 3.30 Tolerance mm : + 0.10 rack travel mm : 2.00 Rated speed rpm : 540 Tolerance 1/min : + 30 TORQUE CONTROL Rated speed rpm : 1075
pre-tension click setting x : 5.50 FULL LOAD DELIVERY AT FULL LOAD STOP Rated speed rpm : 1075 Aneroid pressure hPa : 1200 Del. quantity cm3/1000 strokes : 140.0 Tolerance cm3/1000 strokes : + 1.0 Check tolerance cm3/1000s. : + 4.0 Spreed Tolerance cm3/1000 strokes : 4.0	rack travel mm : 2.80 Testing: Rated speed rpm : 500 rack travel mm : 3.30 Tolerance mm : + 0.10 rack travel mm : 2.00 Rated speed rpm : 540 Tolerance 1/min : + 30 TORQUE CONTROL Rated speed rpm : 1075 rack travel mm : 12.10 Tolerance mm : + 0.05
pre-tension click setting x : 5.50 FULL LOAD DELIVERY AT FULL LOAD STOP Rated speed rpm : 1075 Aneroid pressure hPa : 1200 Del. quantity cm3/1000 strokes : 140.0 Tolerance cm3/1000 strokes : + 1.0 Check tolerance cm3/1000s. : + 4.0 Spreed Tolerance cm3/1000 strokes : 4.0 Check tolerance	rack travel mm : 2.80 Testing: Rated speed rpm : 500 rack travel mm : 3.30 Tolerance mm : + 0.10 rack travel mm : 2.00 Rated speed rpm : 540 Tolerance 1/min : + 30 TORQUE CONTROL Rated speed rpm : 1075 rack travel mm : 12.10 Tolerance mm : + 0.05 Rated speed rpm : 600
pre-tension click setting x : 5.50 FULL LOAD DELIVERY AT FULL LOAD STOP Rated speed rpm : 1075 Aneroid pressure hPa : 1200 Del. quantity cm3/1000 strokes : 140.0 Tolerance cm3/1000 strokes : + 1.0 Check tolerance cm3/1000s. : + 4.0 Spreed Tolerance cm3/1000 strokes : 4.0	rack travel mm : 2.80 Testing: Rated speed rpm : 500 rack travel mm : 3.30 Tolerance mm : + 0.10 rack travel mm : 2.00 Rated speed rpm : 540 Tolerance 1/min : + 30 TORQUE CONTROL Rated speed rpm : 1075 rack travel mm : 12.10 Tolerance mm : + 0.05

ANEROID/ALTITUDE COMPENSATOR TEST

SETTING

Rated speed rpm : 500
Pressure hPa : 1000
rack travel mm : 12.10
Tolerance mm : + 0.10

MEASUREMENT

Pressure hPa : Rated speed rpm : 500
rack travel mm : 9.50
Tolerance mm : + 0.10

Rated speed rpm : 500

Pressure hPa : 750
rack travel mm : 11.60
Tolerance mm : + 0.15

Pressure hPa : 400 rack travel mm : 10.25 Tolerance mm : +- 0.05

FUEL DELIVERY CHARACTERISTICS

Aneroid pressure

1200 hPa Rated speed rpm 600 Del. quantity cm3/1000 strokes : 146.0 Tolerance cm3/1000 strokes : +-2.0 Check tolerance cm3/1000s. 5.0 Spreed Tolerance cm3/1000 strokes : 6.0 Check tolerance

9.0

Aneroid pressure

cm3/1000s.

hPa : Rated speed rpm : 500
Del. quantity
cm3/1000 strokes : 94.5
Tolerance
cm3/1000 strokes : +- 1.0
Check tolerance

cm3/1000s. : + 3.0

BREAKAWAY

Rack travel in mm : 11.10
Rated speed rpm : 1130
Tolerance 1/min : + 5

STARTING FUEL DELIVERY

Rated speed rpm : 100
Del. quantity
cm3/1000 strokes : 130.0
Tolerance
cm3/1000 strokes : + 5.0
Check tolerance
cm3/1000s. : + 8.0

LOW IDLE

Rated speed rpm 500 3.30 rack travel mm 0.20 Tolerance mm Del. quantity cm3/1000 strokes : 11.0 Tolerance cm3/1000 strokes 2.0 Check tolerance 4.5 cm3/1000s. Spreed Tolerance cm3/1000 strokes : 3.5 Check tolerance 5.5 cm3/1000s.

Note remarks

Refer to Service Info for test and adjustment instructions. See microcard(s) W400/...

Edition : 30.03.96 Test oil : ISO 4113

Combination No. : 9 400 083 422

Injection pump

Pump designation : PES3A80b320/3RS1264

EP type number : 9 400 083 053

Governor

Governer design. : RSV350...1200A2C627R

Governer no. : 9 420 083 288

Cust. part No. :

Customer—spec. information Customer : MWM

Motor : D225-3

TEST BENCH REQUIREMENTS

Inlet line : 3.1

Test oil inlet

temp. °C : 40
Tolerance °C : + 2.0

Overflow valve : 1 419 992 198

Inlet press. bar : 1.5

Test nozzle holde

assembly : 0 681 343 009

Opening pressure

bar : 173.5 Tolerance bar : + 1.5

Test Lines : 1 680 750 003

Outside diameter : 6.0

x inside diameter: 2.0

x length mm : 600

REMARKS

(A) INJECTION PUMP SETTING VALUES

Set equal delivery quant. per values _____

BEGINNING OF DELIVERY

Test pressure bar : 26.0 Tolerance bar : +- 1.0

Prestroke mm : 2.25
Tolerance mm : + 0.05

Check

tolerance mm : + 0.10

Rack travel in mm: 10.50 Tolerance mm: + 1.50

Firing order : 1- 2- 3

Phasing : 0-120-240

Beginning of delivery differende

and maximum rack

travel : 10.50
Tolerance mm : +- 1.50
Difference ° CS : 4.50

BASIC SETTING

Rated speed rpm : 1200

Rack travel in mm : 9.45 Tolerance mm : + 0.05

Del. quantity

cm3/1000 strokes : 51.0

Tolerance

cm3/1000 strokes : + 0.5

Check tolerance

cm3/1000s. : +- 2.0

Spreed

N26

Tolerance +	
cm3/1000 strokes : 2.5	control lever
	position degree : 50.0
Check tolerance	tolerance degree : +- 4.0
cm3/1000s. : 4.0 +	DATED CREED
Rated speed rpm : 350	RATED SPEED
rated speed (Mill : 330	rack travel mm : 8.40
Rack travel in mm: 7.00	Rated speed rpm : 1245
Tolerance mm : + 0.10 +	Tolerance 1/min : +- 5
Del. quantity	
cm3/1000 strokes : 9.0	rack travel mm : 4.00 Rated speed rpm : 1300
cm3/1000 strokes : +- 1.5	Tolerance 1/min : +- 15
Check tolerance	TO CO. G. 100 TAIRCH
cm3/1000s. : +- 3.5 +	rack travel mm : 0.85
Spreed	Tolerance mm : + 0.55
Tolerance + cm3/1000 strokes : 4.0 +	Rated speed rpm : 1400
Check tolerance	
cm3/1000s. : 6.0	
+	LOW IDLE
(D) CENTING OF THURSTION DUMP	
(B) SETTING OF INJECTION PUMP +	control lever
WITH GOVERNOON	position degree : 20.0
+	tolerance degree : +- 4.0
GUIDE SLEEVE POSITION	Setting point w/out bumper spring
GOIDE SCEEVE POSITION	betting point wood bumper spring
Rated speed rpm : 800	Rated speed rpm : 350
†	rack travel mm : 5.50
Rack travel in mm: 0.65	Testing:
Totel differ linit	resering.
governor spring	Rated speed rpm : 350
pre-tension +	rack travel mm : 6.00
click setting x : 4.30	Tolerance mm : +- 0.10
	rack travel mm : 2.00
FULL LOAD DELIVERY AT FULL LOAD STOP	Rated speed rpm : 520
†	Tolerance 1/min : +- 30
Rated speed rpm : 1200	Rated speed rpm : 100
Aneroid pressure	Rated speed rpm : 100
Del. quantity	CRT mm min. : > 19.00
cm3/1000 strokes : 51.0 +	
Tolerance	TODOUG CONTROL
cm3/1000 strokes : + 0.5 + Check tolerance	TORQUE CONTROL
cm3/1000s. : + 2.0	Rated speed rpm : 1200
Spreed	rack travel mm : 9.45
Tolerance	Tolerance mm : +- 0.05
cm3/1000 strokes : 2.5 + Check tolerance	Rated speed rpm : 500
cm3/1000s. : 4.0	rack travel mm : 9.50
1	Tolerance mm : +- 0.10
+	
CONTROL LEVED	Rated speed rpm : 400 rack travel mm : 10.90
CONTROL LEVER +	1 ack 11 avet 400 . 10.70

Tolerance mm : + 0.30

BREAKAWAY

Rack travel in mm: 8.40
Rated speed rpm: 1245
Tolerance 1/min: +- 5

STARTING FUEL DELIVERY

Rated speed rpm : 100 rack travel mm : 20.00 Tolerance mm : + 1.00

LOW IDLE

350 Rated speed rpm rack travel mm 7.00 : + 0.10 Tolerance mm Del. quantity cm3/1000 strokes : 9.0 Tolerance cm3/1000 strokes : +-1.5 Check tolerance cm3/1000s. 3.5 Spreed Tolerance 4.0 cm3/1000 strokes : Check tolerance cm3/1000s. 6.0